

Art Direction and Design: Sarah Russell, Blackbird Studio, LLC
Photography: Elissa Monroe

**Department of Internal Medicine
University of Kansas Medical Center
3901 Rainbow Blvd.
Mailstop 1022
Kansas City, KS 66160
www2.kumc.edu/internalmedicine/**

Department of Internal Medicine University of Kansas Medical Center

Annual Report 2010

BEST CARE NOW



TABLE OF CONTENTS

1	LETTER FROM THE CHAIR
2	COMMUNITY OUTREACH
4	INTERNATIONAL OUTREACH
6	CLINICAL
8	EDUCATION
10	RESEARCH
12	ALLERGY, CLINICAL IMMUNOLOGY AND RHEUMATOLOGY
14	CARDIOVASCULAR DISEASES
16	CLINICAL PHARMACOLOGY
18	DERMATOLOGY
20	ENDOCRINOLOGY, METABOLISM AND GENETICS
22	GASTROENTEROLOGY, HEPATOLOGY AND MOTILITY
24	GENERAL AND GERIATRIC MEDICINE
26	HEMATOLOGY AND ONCOLOGY
28	INFECTIOUS DISEASES
30	MEDICAL EDUCATION
32	NEPHROLOGY AND HYPERTENSION
34	OFFICE OF SCHOLARLY, ACADEMIC & RESEARCH MENTORING (OSARM)
36	PULMONARY AND CRITICAL CARE MEDICINE
38	REPRESENTATIVE PUBLICATIONS
46	ENDOWED PROFESSORSHIPS and CONTACTS
48	DONORS
49	FACULTY GIVING

On the cover: The Department strives to maintain the full continuum of care for patients from bench to bedside. In the first photograph Drs. Calvet, Wallace, Parnell, and Wetmore from the division of Nephrology review a slide as a part of their on going research into polycystic kidney disease and other kidney disorders. In the second photograph Pulmonary and Cristal care Fellow Dr. Emily Diederich examines a patient in the ICU.



Dear Friend:

Best care now.

Not just a slogan but a statement. A statement of our dedication in research, in education, in administration, and in clinical medicine to deliver the very best so that our patients reap the benefit.

How do we get there? We get there because we follow five rules.

Save the patient. The single, most important purpose.

Do the right thing. While we focus on providing the best care, we do it by treating others with the same grace and humility we would ask to be treated with ourselves.

Ask questions, seek answers. The mark of an internist. It is what distinguishes us. It is what powers research. It is what drives the best care.

Be the bridge. No matter where we work, we need partners. Our scientists in medicine need scientists in the basic sciences and in our community. Our clinicians need consultants most of all, to do our best for our patients. As scientists and clinicians, we must work together to find answers to deliver the best care. This is the academic difference.

Those who laugh, last. We all work hard. If we work together and enjoy each other, we are all the better for it.

Taking our mission from the bench to the bedside, we seek to follow these five simple rules; they drive us forward. They drive us in the middle of the night when we come back to complete an experiment. They drive us in the middle of the night when we come in to the ICU or to the emergency room to take care of a patient. They drive us in the middle of the night when we study for boards and prepare for our careers. They drive us in the middle of the night when we work to raise money with our community to further our mission. In the pages of this report, you will see the story of how we seek to provide the best care now.

These pages are meant to tell the story of how we do this together as the Department of Internal Medicine. They are meant to inspire as you see what makes us special. We want you to see why we come to work every day excited and enthusiastic and with a sense of purpose to accomplish our mission like no other.

Here you will find stories of people who take care of patients and do it with quality that is unrivaled in the healthcare field. You can measure this achievement by many means. With awards from *US News and World Report* and from the University Health System Consortium, we are consistently recognized as one of the best medical centers in the United States. Bold, but true. And our quality tells our story.

In medical education, our residents routinely list their experience with faculty as one of the most important drivers they have. When our residents conclude their training, our program is always ranked as superior.

In research, our projected 20 percent improvement in our NIH rankings shows the resources and the depth to transform medicine.

In each of these areas, we are here to provide the best care now. So read on and learn our story. I believe you will find our narrative compelling and insightful.

Sincerely,

Steven W. Stites, M.D.
Peter T. Bohan Professor and Chair,
Department of Internal Medicine
University of Kansas Medical Center



Doctor for a Day

On September 13, 2010, the Department of Internal Medicine hosted the first annual “Doctor for a Day” event. This was an educational outreach program for high school students from throughout the state of Kansas. The program was designed to expose students to all aspects of academic medicine, from bench to bedside. It also provided them the opportunity to talk one-on-one with faculty in their specific areas of interest while also pairing them with medical students, residents and fellows, who were more than willing to answer questions and establish future mentoring and shadowing opportunities.

The program started with a series of interactive lectures on cardiovascular diseases, infectious diseases, endocrinology metabolism and genetics (diabetes), pulmonary and critical care medicine, gastroenterology and hematology/oncology. After a faculty luncheon, the students moved on to a variety of lab tours including the REACH lab (Research in Exercise and Cardiovascular Health), the Liver Center, the Great Plains Diabetes basic science labs, the Gastroenterology cancer research labs and the School of Medicine’s skills labs. The closing session included the Associate Dean of Admissions from the School of Medicine, who was able to address specific questions relating to pre-admission preparations, preferred academic matriculation tracks and financial cost.

The true success in this program can be measured in the follow-up from the students. One letter read as follows:

“Dear Dr. Simpson: I want to thank you for speaking to us at the Doctor for a Day event. I was truly fascinated by all of the information you gave us on severe sepsis. I never knew how common it was. About three years ago my older sister developed severe sepsis and did not survive. She was born with a severe case of cerebral palsy, so she could not talk or walk. We did not know anything was wrong until it was too late, so your lecture hit close to home. It is encouraging to know there is someone out there helping prevent what my family had to go through.”

International Outreach Medical Missions

In 2010, faculty and fellows from the Department of Internal Medicine traveled beyond the contiguous United States to deliver healthcare services in the countries of Belize, Ecuador, Guatemala, and Kenya. This year the Department was represented by Drs. Leland Graves, Heather Male, Krishna Rangarajan, Steven Simpson, Sarah Taylor, Steve Williamson and Tim Williamson. Although no two trips are alike, the overall outcomes are always positive.

Dr. Leland Graves accompanied a medical team that traveled to Ecuador working out of a hospital in Ambato, three hours south of the capital, Quito. Dr. Graves provided primary care for pediatric and adult patients, with a special emphasis on diabetic care. Ecuadorian medical students worked with the mission team providing translational services and learning pediatric internal medicine and surgical care. During the week a total of 411 patients were cared for with 369 clinic visits and 42 surgeries. The next trip is planned for the summer of 2011.



Ambato, Ecuador

For the past three years, Dr. Sarah Taylor has accompanied first- and second-year medical students from the KUMCIO organization on medical outreach trips to Belize. The students raise the funds for not only their expenses but also the operational expenses, such as the cost of medications, equipment, vans, housing and transportation. They coordinate this process through the Belizean health department. The group creates eight clinics, usually using churches or schools, in small villages throughout the jungles of southern Belize. The majority of the patients are children, and it is a long and difficult path to get to a medical doctor. Many have had health issues for a long time, such as otitis, scabies, anemia, infected wounds, fractures, urinary tract infections, spina bifida, asthma, pneumonia, bronchitis, arthritis, gout, rashes, dental abscesses, and tendonitis. The team involved feels this opportunity is always an adventure and a great experience for all.

For the second summer in a row, Dr. Tim Williamson led a medical mission trip to Maai Mahiu, Kenya. The group also included fellows and a nurse from KUMC. The team completed four days of outpatient clinics in Maai Mahiu, and a half-day clinic with an internally displaced person (IDP) camp on the outskirts of town. The final time was spent working with the Kijabe Hospital, where the team saw internal medicine, women's health and pediatric patients. The overall case load included malaria, adult and pediatric HIV, typhoid fever, yaws, severe developmental delay and malnutrition, in addition to the more typical medical cases such as asthma, ear infections, pregnancy, STDs, arthritis, etc. A return trip to the area is planned for 2011.



Maai Mahiu, Kenya

International Outreach

Visiting Faculty

In 2010 the Department of Internal Medicine was well represented around the globe. Our faculty conducted conferences, presented papers and explored common academic interests with the international healthcare community. The following divisions were represented: Cardiovascular Diseases, Clinical Pharmacology, Endocrinology, Gastroenterology/Hepatology, and Nephrology.

The destinations included:

Vienna, Austria	Yokohama & Okayama, Japan
Beijing, China	Busan, South Korea
Vancouver, Canada	Stockholm, Sweden
Heidelberg, Germany	Taipei & Taiching, Taiwan
Rome, Italy	

Topics of presentations:

Effect of Low-Density Lipoprotein Apheresis on Plasma Levels of Apolipoprotein e4

Acute Reduction of Lipoprotein A Following LDL Apheresis Long-Term Follow-Up in Patients Studied with 64 Slice Cardiac Computed Tomographic Angiography

Left Atrial Appendage and Left Atrial Volumes in Patients with Normal Sinus Rhythm and Recurrent Atrial Fibrillation by 64 Slice Computed Tomography

Contribution of the HCV p7 ion channel activity to infectious virus production

Viral modulation of hepatic cytoprotection: FOXO3 and the interplay of HCV and alcohol on the liver

Optimizing glycemic control of type 2 diabetes

Bone Turnover and Prevention of Osteoporosis in Patients with Acute Myeloid Leukemia Undergoing Allogeneic Stem Cell transplantation

Re-Emptive Treatment with Rituximab for Epstein Barr virus reactivation after allogeneic Hematopoietic Stem Cell Transplantation



World Congress of Neurotechnology-2010 (Rome, Italy) chaired by Dr. Faris Farassati: Left to right: Dr. Farassati (KUMC), Dr. Martuza (Harvard Medical School)

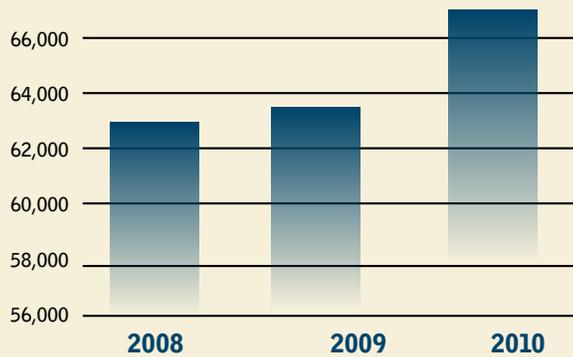


Kawasaki Hospital

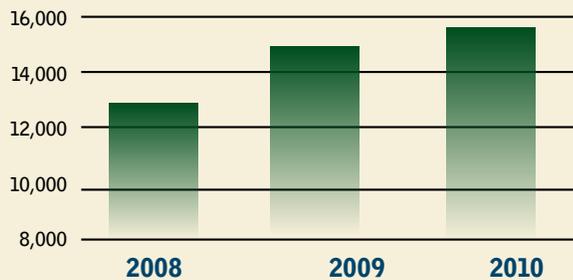


Dr. David Robbins, presentation in Yokohama, Japan

OUTPATIENT VISITS



INPATIENT ADMISSIONS



The Department of Internal Medicine at the University of Kansas is celebrating a banner year. We started off with being named among the 2010 America’s Best Hospitals in six specialties, four of which are anchored within the Department of Internal Medicine. This honor is the result of the careful analyses by *U.S. News & World Report* of the offerings and outcomes in over 5,000 U.S. hospitals. The Department’s own Nephrology and Cardiology divisions were repeat awardees and moved up in rank to 32nd and 37th, respectively. The Pulmonary Division made its debut appearance on the list at number 30; and finally, Geriatrics, which is covered by all medical divisions, came in at 47. And while we are pleased with our rankings, we are extremely proud of the improved survival rates of patients cared for by our services; Nephrology was number two in the nation in kidney transplant mortality, and Pulmonary was number six in mortality of the critically ill patients cared for in the ICUs. For years we have known that quality and safety needed to be our highest priority in developing our clinical programs; we are honored to be recognized for our efforts.

In addition to our 2010 national quality honors, it has been a year of remarkable growth. Our strategy has been to grow our programs and services directed toward answering the needs of our community and the state of Kansas. With over 20 new faculty, we are well on our way to doing just that. These new faculty are addressing the rapidly expanding needs within our premiere programs, such as solid organ transplantation in liver, kidney, pancreas, and bone marrow. Other areas of expansion include our Heart Hospital expansion with a new arrhythmia center; our Pulmonary Hypertension Center, with cutting-edge clinical trials, and the Bloch Cancer Center.

Of course, we are not ready to stop here. In June of 2011 we will move into our new state-of-the-art medical office building, positioning ourselves to orchestrate the optimal patient experience in the coming years.



Medical Education

The faculty members in the Department of Internal Medicine are integrally involved in the continuum of Undergraduate Medical Education, from interviewing candidates for medical school through leading didactic, small-group and clinical teaching in all four years of medical school. Similarly for graduate medical education, our faculty members teach our Internal Medicine residents and fellows in our 12 fellowship programs through didactic presentations, journal clubs, clinical care and scholarly projects. Our goal for undergraduate medical education is to produce outstanding physicians who will excel in their chosen specialties. For our internal medicine residency and our fellowships, we strive to develop highly competent internists and sub-specialist physicians who will carry on the highest traditions of patient care, education and scholarship. Our emphasis is on patient-centered care and a team-based approach, which contributes to remarkable patient outcomes at the University of Kansas.

Our faculty members are advisers to medical students through the University of Kansas School of Medicine Academic Societies, informal career mentors and role models, project mentors and advisers, including the Health of the Public projects in the fourth year of medical school. Some of our faculty members volunteer in the Jay Doc Clinic, a student-run practice. Our faculty members are mentors to our residents and fellows, collaborating with them on a range of scholarly and research projects as well as supporting them in their career development.

Internal Medicine faculty have leadership roles in our Third Year Clerkship, Fourth Year Sub-internship, Residency and Fellowship programs. Not only do our educational leaders collaboratively design and implement innovative educational programs, they are members of the larger faculty involved at the school level in undergraduate and graduate medical education.

Our residents and students practice, teach and learn at the University of Kansas Hospital and Medical Center, the Kansas City Veteran's Hospital and the Dwight D. Eisenhower Veteran's Affairs Hospital in Leavenworth, Kansas. Our residency has grown over the last three years from a complement of 20 residents per year to 26 residents per year. Applications for residency positions hit a record high of more than 1,400 applicants this year.

Our residency has developed a set of curricular innovations that meet the requirements of the Internal Medicine Residency guidelines and, most important, prepare our learners to meet the

demands of 21st-century practicing physicians. Our residents participate in inpatient rotations on the hospital wards and the Medical and Cardiac Intensive Care Units as well as having subspecialty-based electives.

Our innovative monthly Patient Safety Conference utilizes the Healthcare Matrix from Vanderbilt University. The goal of the conference is to best assess issues in patient care and quality, to design a systems-based framework for those cases, and to develop solutions to ensure the highest quality patient care.

Our Ambulatory Education has been enhanced with the addition of partnerships with Westwood Internal Medicine physicians and Kansas City Internal Medicine, and ongoing relationships with Swope Health Partners in Missouri, the Kansas City Veterans Hospital, and the University of Kansas Medical Center Clinics. Our new residency track, the Primary Care and Ambulatory Sub-specialty Track, is designed to meet the curricular and anticipated practice needs of our graduates interested in those specific career goals.

Further recent developments around quality care include an additional rotation to enhance our systems-based practice for the care of patients in the evening. This rotation is paired with instruction in quality improvement through both hands-on and didactic learning.

Expanded research support within the Department through the Research Office as well as OSARM (Office of Scholarly Academic and Research Mentoring) gives our residents unprecedented opportunities in faculty-mentored research. Our residents are involved in a number of projects, including clinical research and quality improvement.

Our department has developed and continues to use a model of educational-effort funding called the Educational Value Unit system. This program funds educational leadership and educational effort at the undergraduate and graduate medical education levels. We continue to use this innovative program as we further develop our curricula and necessary faculty support to most effectively design, implement and evaluate our new, as well as our current, curricular interventions.

Some of our graduates stay in the Kansas City area and enter subspecialty fellowship programs, academic practice or private practice in the hospital or office. Other residents earn spots in competitive fellowship programs across the country, further enhancing KU's reputation.



Transforming Lives Through Research

The Department of Internal Medicine has a thriving and rapidly expanding research portfolio that spans the entire spectrum of biomedical research from genes and molecules to translation of discoveries in the community. The researchers within various divisions are actively engaged in cutting-edge pursuits of discovery that promise to shape the future of patient care. With the inception of a Cardiovascular Research Institute and a new Research Office, the department has witnessed unsurpassed enthusiasm and support for research during the past year.

The research in our department is supported by grant awards from the National Institutes of Health, other national agencies, clinical trials, and philanthropy. We are particularly proud of our success in this area. Indeed, Internal Medicine's reputation for outstanding research was reflected in the amount of federal and private support we received. We saw an impressive 33 percent increase in the number of new grants in 2010, a 51 percent increase in total grant funding in the last 10 years, and a remarkable 136 percent increase in new grant dollars awarded to the Internal Medicine Department in 2010.

Curiosity, imagination, motivation, perseverance, and expertise. These are some of the attributes that our researchers share to perform the extraordinary work that they have done over the past year. We are extremely proud of all of our investigators, and feature three who represent the wonderful group that we are fortunate to have. Their work truly has the potential to transform lives through research.

The number of people affected by kidney disease is staggering. According to the National Kidney Foundation, an estimated 26 million Americans are living with kidney disease, and millions more are at increased risk for the development of this disorder.

Dr. Jason Stubbs recently received a National Institutes of Health K08 Award to explore the interrelationships of mineral metabolism pathways in kidney disease. Dr. Stubbs will use molecular methodology to define the role of aberrant phosphate and vitamin D metabolism as contributors to the co-morbidities associated with progressive kidney disease.

More specifically, his research will focus on fibroblast growth factor 23 (FGF23), a novel hormone produced by bone that has been found to regulate phosphorus and vitamin D levels in the body. Circulating levels of FGF23 are extremely elevated in patients with chronic kidney disease, and this increase has been independently associated with increased morbidity and mortality in this population. The discovery of this hormone has challenged the traditional hypothesis regarding the origins of mineral metabolism abnormalities in patients with chronic kidney disease. Dr. Stubbs and others have postulated that the early production of FGF23 from bone is an inciting event leading to subsequent mineral metabolism abnormalities in patients with chronic kidney disease.



Jason R. Stubbs, MD
Assistant Professor,
Division of Nephrology and
the Kidney Institute

*Taking aim at mineral
metabolism defects in
kidney disease*

Dr. Stubbs plans to use a mouse model of progressive kidney disease to elucidate the complex interaction between mineral metabolism pathways in relation to FGF23, and to identify the specific contributions of these pathways to the vascular and bone pathologies that are common in this setting.



Steven A. Weinman, MD

*Professor, Division of
Gastroenterology and
Hepatology*

*Understanding liver injury
produced by HCV & alcohol*

Dr. Steven Weinman is leading NIH-funded projects to determine how hepatitis C virus (HCV) infection interacts with alcohol and other environmental stresses to produce liver injury, cirrhosis, and hepatocellular carcinoma.

Previous work from his group demonstrated that the viral core protein regulates mitochondrial calcium uptake, resulting in direct increases of mitochondrial superoxide production; alterations of cell death pathways; and oxidative modification of DNA, proteins, and lipids. In collaboration with Dr. Prashant Pandya, his laboratory has also recently shown that HCV-infected patients have a worse outcome than non-infected patients when they develop alcoholic hepatitis.

Dr. Weinman's current research is leading the way in understanding how HCV alters normal liver protective responses to alcohol and interferes with pathways that regulate antioxidant function, autophagy, and cell proliferation. This work is aimed at developing new clinical approaches to reduce liver injury produced by HCV and alcohol.

The JAK-STAT axis plays a critical role in signaling initiated by various growth factors as related to cell survival and apoptosis. Over the past decade, Dr. Xuan's work has identified a role of this pathway in protection of heart muscle against ischemic injury, a phenomenon termed "ischemic preconditioning." With extensive experience in cellular and molecular biology, Dr. Xuan is a leader in our quest to utilize this information in protecting the heart during heart attacks.

Currently, Dr. Yu-Ting Xuan's NIH-funded research is focused on understanding the complex signaling pathways involved in the activation of transcription factors leading to the upregulation of cardioprotective proteins during myocardial ischemia/reperfusion injury and ischemic preconditioning. In related projects, Dr. Xuan's team is also working on improving the survival of bone-marrow-derived adult stem cells after transplantation into the heart. If successful, results from these projects are likely to benefit thousands of patients with coronary artery disease who experience heart attacks.



Yu-Ting Xuan, PhD

*Professor, Division of
Cardiovascular Diseases,
Cardiovascular Research
Institute*

*Getting to the Heart of
the Cardioprotection*

We want to thank all of our researchers for their contributions to the advancement of medicine, and for continuing to keep the Department of Internal Medicine in the spotlight for innovative and groundbreaking medical discoveries.

ALLERGY, CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

Daniel J. Stechschulte, MD, Division Director

The Division faculty includes five full-time, four part-time and four volunteer clinical faculty members. The Division plans to add at least three faculty in rheumatology and allergy in the next two years.

In the research arena, the Division is expanding its basic and clinical research efforts, combining the two programs whenever possible. It expects to renew a basic science NIH-funded grant that focuses on vascular biology and inflammation, which has been a very productive program. We expect to secure additional extramural funding for basic research. In addition, more than 25 clinical research initiatives explore treatments for specific diseases such as rheumatoid arthritis, systemic lupus erythematosus, scleroderma, asthma and hereditary angioedema (HAE). Other projects include inflammatory osteoarthritis of the knee and the effect of intra-articular corticosteroids on bone turnover in osteoarthritis.

In regard to basic research, the Division has an NIH-R01 grant and an NIH-Supplemental grant, which support studies on the role of mast cells on vascular inflammation and atherosclerosis. Basic research activities continue to facilitate interdisciplinary collaborations with physicians and scientists from various departments and centers, including the Cardiovascular Research Institute, Kidney Institute, Department of Pathology & Laboratory Sciences, Department of Pharmacology, Toxicology & Therapeutics, Department of Molecular & Integrative Physiology, and the Kansas City VA Medical Center. One of our faculty members continues to serve as a study section member for the American Heart Association and for the NIH on the National Institute of Allergy



and Infectious Diseases' special emphasis panel for Asthma and Allergic Diseases Cooperative Research Center program projects.

Educationally, the Division is expanding its Rheumatology Fellowship Program from one to two trainees per year. First-year fellows have participated in a nationally supervised musculoskeletal ultrasound training program, which includes an off-site two-day training course and a one-day practical examination. A visiting professor grant brought an internationally recognized rheumatologist for a three-day program, during which he gave a mixture of formal lectures and hands-on workshops highlighting multiple applications of musculoskeletal ultrasound. We now have one full-time faculty member in rheumatology at the Kansas City VA Hospital. Extramural funding

supports full-body joint-examination workshops for 175 second-year medical students annually as part of their musculoskeletal module; these workshops are given by trained instructors who have patients with rheumatoid arthritis.

In its clinical practice the Division is committed to providing high-quality, sensitive and efficient care. The Division is among leaders in rheumatology training in utilizing musculoskeletal ultrasound to assess rheumatic disorders and also has improved the accuracy and safety of joint injections for treatment of acute pain.

With its two existing Fellowship Programs, the Division deals with all immunology-related diseases, ranging from hypersensitivity reactions to immunodeficiency to autoimmune or immune

system dysregulation. Since the immune system participates in aging and cancer, and many inflammatory diseases are treated with biologic medications affecting the immune response, the Immunology and Rheumatology Division interacts with almost every specialty at the University. Recent Division highlights include expanded services at KUMC, KU Med West, and the Kansas City VA Hospital, expanded resident and fellow lectures, more than 25 ongoing clinical trials, multiple presentations at national meetings, and continued NIH funding for basic research. Dr. Stechschulte has provided skilled leadership of the Division and its two Fellowship Programs for more than 30 years.



FACULTY:

- Michelle L. Altrich, PhD**
- James Anderson, MD**
- Basem Awadh, MD**
- Celina C. Bernabe, DO**
- Ken D. Brandt, MD**
- Kottarappat N. Dileepan, PhD**
- Paul L. Katzenstein, MD**
- Kevin M. Latinis, PhD, MD**
- Herbert B. Lindsley, MD**
- John D. Martinez, MD**
- Daniel J. Stechschulte, MD**
- Connie K. Teng, MD**
- Damandeep Walia, MD***

*denotes VA



Dr Herbert Lindsley examines a patient with a painful wrist, using a rheumatology office-based ultrasound instrument.

CARDIOVASCULAR DISEASES

Buddhadeb Dawn, MD, Division Director



It is an honor to report another wonderful year of achievements for our Division. We set our goals high, stayed focused, and worked hard to excel in all spheres of academic cardiology. Our exemplary success is driven by an outstanding team and our extraordinary commitment to our profession.

During the past year, the Division of Cardiovascular Diseases continued to deliver outstanding patient care, train the next generation of cardiovascular physicians, and perform cutting-edge research to advance the knowledge to cure. The members of our outstanding team are driven to exceed the expectations in every aspect of research, teaching, and clinical cardiovascular care.

The Division Director,

Buddhadeb Dawn, MD, is a highly accomplished, NIH-funded physician-scientist with a focus on adult stem-cell therapy for heart repair. He serves on the editorial team of five leading cardiovascular journals as well as on NIH grant review panels. As Division Director and as Vice Chair of Research in the Department of Internal Medicine, Dr. Dawn has been able to stimulate research activities across a wide spectrum of individuals, including medical students, residents, fellows, and faculty. The clinical research operations within the Cardiovascular Research Institute have also witnessed rapid growth, with initiation of numerous investigator-initiated research projects and participation in clinical trials testing innovative therapy that may

benefit patients in this region. The basic science projects have increased exponentially with studies of adult stem-cell biology, their therapeutic utility for heart repair, and studies of cardiac protection during heart attack and cardiac arrest.

The Division also invested substantially in the training and education of fellows in general cardiovascular track as well as in interventional and electrophysiological subspecialties. The Cardiovascular Program was recently approved for a total of 15 fellows, reflecting an increase by six additional fellows; and the Interventional Fellowship Program was approved for two fellows, an increase by one. Several of these additional positions have already been filled, thereby increasing

the capacity of our program to provide outstanding cardiovascular physicians in the region.

The members of the Division remained highly productive, with numerous publications in top-tier cardiovascular journals — for example, *Circulation*. A number of fellows presented abstracts at national and international meetings, including the annual Scientific Sessions of the American Heart Association and the European Society of Cardiology. In summary, the Cardiovascular Division enjoyed a splendid year with remarkable achievements in all spheres of academic medicine, and looks forward to an even brighter future with unbridled energy and dedication from a superb team of physicians, trainees, and staff.



Dr. Matt Earnest performs a cardiovascular catheterization in one of the University of Kansas Hospital's cardiovascular laboratories.

FACULTY:

**Rajat Barua, MD
Gary Beauchamp, MD
Loren Berenbom, MD
Ravi Bhagat, MD
Steven Bormann, MD
Dak Burnett, MD
Ricardo Ciniglio, MD*
Buddhadeb Dawn, MD
Raghu Dendi, MD
Jose Dulin, MD
Marvin Dunn, MD
Matt Earnest, MD
Martin Emert, MD
Ryan Ferrell, MD
Jon Freeman, MD
Steven Freeman, DO
Randall Genton, MD
Steven Gollub, MD
Kamal Gupta, MD
Marina Hannen, MD
James Harbrecht, MD
Roy Hegde, MD
Robert Herman, MD
Lynn Kindred, MD
Dhanunjaya Lakkireddy, MD
Edward Laughlin, MD
H (Dan) Lewis Jr., MD
Ashwani Mehta, MD
David Meyers, MD
Marriyam Moten, MD*
Kevin Mulhern, MD
Jayant Nath, MD
Steven Owens, MD
Deepak Parashara, MD
Rhea Pimentel, MD
Charles Porter, MD
Thomas Rosamond, MD
Santosh Sanganalmath, MD, PhD
Sherman Steinzeig, MD
Peter Tadros, MD
Tony Tseng, MD
James Vacek, MD
Brian Weiford, MD
Mark Wiley, MD
Douglas Willhoite, MD
David Wilson, MD
Dong Xu, MD
Yu-Ting Xuan, PhD**

***denotes VA**

CLINICAL PHARMACOLOGY

Patrick Moriarty, MD, Division Director



Unique and visionary are probably the words which best describe the Clinical Pharmacology Division at the University of Kansas.

A discipline whose emphasis often varies from institution to institution, Clinical Pharmacology at KU has carved out a niche for itself in the prevention and treatment of atherosclerosis, a condition often treated by specialties ranging from cardiology to endocrinology.

The University's Atherosclerosis Center, founded in the 1960s, was one of the first in the Midwest, serving patients with atherosclerosis, which is the abnormal deposit of cholesterol within the arterial wall and the number-one cause of cardiovascular disease (CVD). Despite having

the same exposure to plasma cholesterol, atherosclerosis does not occur in any veins or most arteries. The disease is segregated, based primarily on hemodynamic flow to arteries such as the coronary, the carotid, and the abdominal aorta. The Center specializes in the diagnosis and treatment of patients with atherosclerosis who do not respond to traditional therapy. Treatments include diet, exercise, presently available medications, and future therapies under investigation. The Center is also the only site in the region, and the largest in North America, which provides LDL-apheresis therapy.

LDL-apheresis is a nascent procedure through which a device filters plasma from the body and removes cholesterol and inflammatory and clotting factors while

immediately improving microvascular flow. The process can reduce cholesterol levels by 80 percent in just three hours. Treatments occur on average every two weeks and is covered by Medicare and most healthcare providers. LDL-apheresis's improvement of microvascular flow may have a profound impact on certain cases of blindness and deafness. KU is the only institution in the United States currently researching the benefits of LDL-apheresis in these and other vascular conditions.

Another leading-edge clinical service the Division offers its patients is the diagnosis of early asymptomatic atherosclerosis vascular disease by measuring the carotid artery wall's thickness via a specialized computer edge-detecting ultrasound device, which

can identify abnormal thickness of the carotid and indirectly predict a similar abnormality of the coronary arteries. Also the leader in this clinical procedure, the Center has performed more than 2,000 measurements in the past 10 years for both clinical use and research studies.

In terms of research, the Division is engaged in approximately 10 clinical studies at any given time, including industry- and investigation-initiated studies on LDL-apheresis, medical therapy, and natural remedies for the treatment of atherosclerosis and its risk factors (cholesterol, obesity, hypertension, and genetics), as well as clinical and basic sciences research related to drug interaction and the gastric absorption of over-the-counter remedies.



FACULTY:
James Backes, PharmD
Kenneth Grasing, PhD*
Patrick Moriarty, MD
Greg Reed, PhD
Janelle Ruisinger, PharmD

*denotes VA

Dr. Patrick Moriarty, Director for the Atherosclerosis Center, is featured standing next to two of the Center's apheresis machines. These machines, which filter plasma from the body and remove cholesterol, have the ability to immediately improve a patient's microvascular flow. KUMC is one of only a few centers in North America that can provide this service.

DERMATOLOGY

Daniel Aires, MD, Division Director



Dermatology residency programs are in high demand. As one of only 108 programs in the nation, KU's Dermatology Division has been expanding its educational, clinical and research programs.

New policies have increased physician oversight in educational activities in the three-year program and expanded the range of subjects taught. Expanded procedural training includes complex flap closures, Mohs surgery and lasers, as well as techniques such

as medical and cosmetic BOTOX® and cutaneous fillers. The full-time clinical teaching staff in the program has expanded from eight to 14 faculty members. Residents now read their own pathology slides with a full-time KU faculty dermatopathologist.

The training program has expanded from seven to 11 residents. The program receives over 300 applications for three to four positions each year.

Dermatology patients have benefited from expanded access

as the number of clinics has grown and as the range of treatments and techniques has expanded.

Dermatology patients also gain benefits from the presence of other specialties working in unison to treat complex conditions.

Extramural as well as intramural funding has resulted in increased research. Work by KU Dermatology faculty members has resulted in over 25 scientific publications in the past five years. Manuscripts currently in submission range from treatment of the

deadly disease toxic epidermal necrolysis to the role of T-cell trafficking in tumor prevention. Ongoing research programs include mapping squamous cell carcinoma progression in humans and looking for the means to delay aging in mice and people.

In sum, Dermatology has had a successful past few years. The entire division looks forward to growing stronger in the future.



FACULTY:

Daniel Aires, MD
Kristi Canty, MD⁺
Mark Cohen, MD
Beatriz Coquilla-Canete, MD*
Garth Fraga, MD
Kimberly Horii, MD⁺
Thelda Kestenbaum, MD
Deede Liu, MD
Brandon Newell, MD⁺
Amy Nopper, MD⁺
James Scherbenske, MD*
Vidya Sharma, MD⁺
Allison Swanson, MD⁺
Viseslav Tonkovic-Capin, MD

*denotes VA

⁺denotes CMH

Dr. Deede Liu talks with patient Janice King during a recent office visit. Dr. Liu was able to get Ms. King's chronic pyoderma gangrenosum ulcers to heal by treating them with topical crushed dapsone. A report on this novel treatment has just been accepted for publication in the *Journal of Drugs in Dermatology*.

ENDOCRINOLOGY, METABOLISM AND GENETICS

Leland Graves, MD, Division Director



The Division supports a large clinical practice as a regional referral center for patients with diabetes, osteoporosis, thyroid cancer and other thyroid disease, as well as a wide range of adrenal, pituitary, ovarian, testicular and genetic disorders. The Division has coordinated a multidisciplinary Diabetes Care Team to improve outcomes for hospitalized patients. Physicians provide 3,000 inpatient visits every year at the University of Kansas Hospital. In the outpatient clinics, the Endocrine Division provides 8,000 visits to our physicians, diabetes educators and bone-density services yearly.

The Cray Diabetes and Self Management Center and the Hiatt Osteoporosis Center are acknowledged for their excellence and leadership. Such performance is the work of eight committed faculty members and a staff of advanced care providers, nurses, research personnel and administrative staff.

David Robbins, MD, founder and Director of the Cray Diabetes Institute and the Midwest Diabetes Coalition, has built an inter-organizational, cross-state collaboration of institutions and individuals devoted to research, patient care, and education. The Diabetes Institute applies \$12

million in external funding to research in basic, translational, and patient care. Statewide projects advance the education and care of patients with diabetes in rural areas. A number of ongoing trials are investigating new treatment agents.

Barbara Lukert, MD, directs the newly organized Musculoskeletal Institute, which brings together organizations and individuals within different disciplines working on research in bone and skeletal health. Projects within the Hiatt Clinic are investigating the effect of vitamin D on bone health and vascular disease, and clinical trials are studying new

agents to treat osteoporosis.

Outside the classrooms, Internal Medicine residents rotate through inpatient and outpatient services, learning diabetes management for acutely ill patients and long-term management strategies for diabetes and other endocrine diseases. An Endocrinology Fellowship trains internists in the specialty of Endocrinology, Diabetes and Metabolism. The Division's educational mission reaches out directly to patients with diabetes, osteoporosis and other endocrine disorders via classes, one-on-one education, online learning, and community-based programs.

FACULTY:
Rajib Bhattacharya, MD
Debra Collins
Majed Dasouki, MD
Leigh Eck, MD
Wayne Fowler, MD, PhD*
Leland Graves, MD
Joseph Kyner, MD
Barbara Lukert, MD
Kurt Midyett, MD
David Robbins, MD
R. Neil Schimke, MD

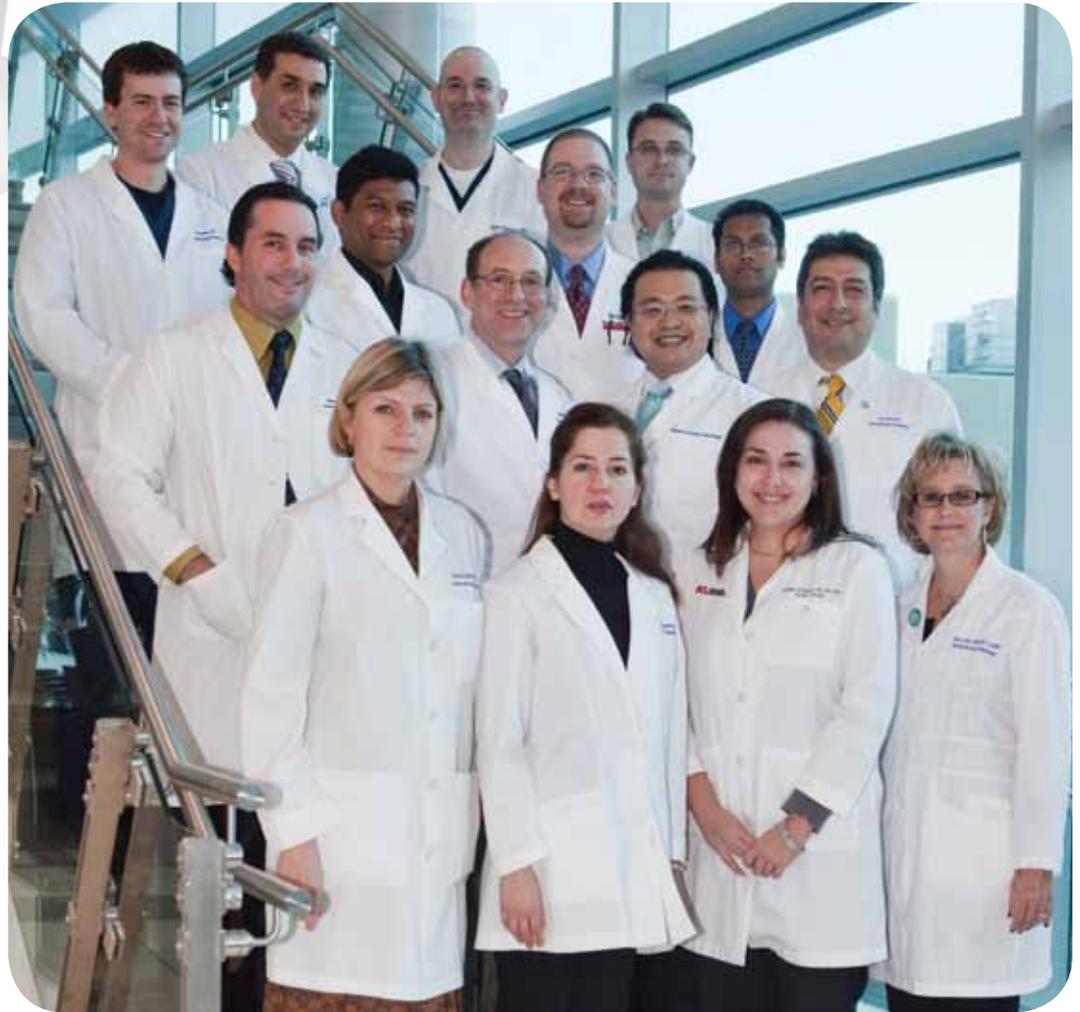
*denotes VA



Dr. Leigh Eck performs a thyroid examination on a patient during her recent follow-up visit.

GASTROENTEROLOGY, HEPATOLOGY AND MOTILITY

Mojtaba S. Olyae, MD, Division Director



The Division of Gastroenterology (GI), Hepatology and Motility at KUMC is highly committed to the principles of academic medicine. This is embodied by offering the highest quality of patient care, contributing to the advancement of the field by research and providing a fellowship program compatible with the highest standards. A sincere commitment to offer the best possibilities to our patients and to provide them with relevant, succinct, and clear information to make an informed decision is one of the core values of our devoted team of physicians, nurses,

nutritionists, technologists, and administrative staff. Our dedicated faculty members not only perform on the basis of such principles in their daily practice, but also train our fellows to perform on the true values of academic medicine in theory and action.

One of the most important avenues in this regard is introducing the concept of patient care as a multifaceted yet highly dynamic matter. Within our Division, we not only approach the clinical necessities for each case from our sub-specialized point of view by using the state-of-the-art

facilities, but also maintain our review of long-term needs with a systematic approach. With a wide spectrum of care, a series of GI-related diseases, GI and liver cancer and nonsurgical treatment of esophageal cancer, therapeutic endoscopy and endoscopic ultrasound, diseases of liver including liver transplantation, motility disorders are treated with highly successful outcomes.

Research, in this scenario, is of crucial importance, as it not only advances the field (benefiting the patients in the long term) but also expands the minds

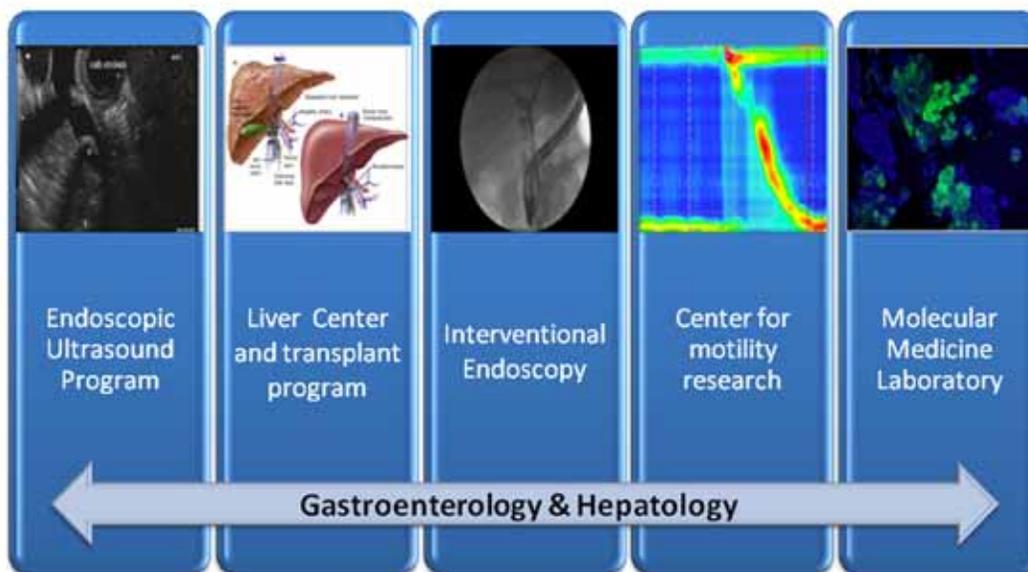
beyond daily matters of practicing medicine. Our division, with opportunities for clinical, molecular, and translational research, seeks to foster and promote our long-standing tradition of offering faculty and fellows a number of opportunities to be involved in cutting-edge research.

Research maintains a tradition of excellence at the forefront of discovery. Clinical studies focus on innovation: treatments for gastrointestinal disorder and testing and developing technology such as biomarkers for gastrointestinal disease.

FACULTY:

Shrikant Anant, PhD
Ajay Bansal, MD*
John Bonino, MD
Dan Buckles, MD
Allan Cooke, MD
Winston Dunn, MD
Tuba Esfandyari, MD
Faris Farassati, PhD, Pharm D
Richard Gilroy, MD
Scott Grisolano, MD
Mojtaba Olyaei, MD
Prashant Pandya, DO*
Amit Rastogi, MD*
Savio Reddymasu, MD*
Prateek Sharma, MD*
Elena Sidorenko, MD
Ryan Taylor, MD
Steven Weinman, MD, PhD

* denotes VA



The chart above shows the continuum of patient care that is available to patients who choose the Division of Gastroenterology for their healthcare services.

GENERAL AND GERIATRIC MEDICINE

Stewart Babbott, MD, Division Director



An energetic and committed faculty of 39, including four chief residents, integrates the division's four major areas of focus – ambulatory medicine, geriatrics, hospital medicine and palliative care. The Division's mission is to provide high-quality patient care through clinical service, education, and scholarship.

Faculty members are involved in the medical education leadership of both undergraduate and graduate medical education. In addition to program leadership of the third-year core Internal Medicine (IM) Clerkship and the IM Residency Programs, our faculty is integrally involved in teaching students and residents in both inpatient and outpatient settings.

The Division staffs the Internal Medicine residency clinic,

which reported more than 15,035 patient visits last year, and some faculty members maintain private practices as well. The Division staffs four housestaff Hospital Medicine services, three private services and a general medicine consultation service.

Faculty physicians are actively involved in the medical directorships: collaborations between the physicians and hospital to meet the Five Star goals of the University of Kansas Hospital. These directorships include the design, implementation, and evaluation of the electronic health record across the health systems, hospital-based care, clinical nutrition, pneumonia (core measure focus), unit-based care and palliative medicine.

Geriatrics – multidisciplinary by nature – crosses over several departments in the School of

Medicine. Within the General Medicine and Geriatrics Division, four internal-medicine-trained physicians focus on geriatrics. Their work is primarily conducted at the Landon Center on Aging, a freestanding, modern facility with easy access for patients. This year we have broadened our scope of geriatric medicine practice and clinical education to include post-acute care of older adults in a community-based skilled nursing unit.

The Palliative Care Program also uses a collaborative model to support patients and families who are confronted with advancing, life-limiting illness. The program ensures that patients' preferences are understood and honored, and that patient comfort and family needs are met. In addition, this caring staff thoughtfully provides

responsible stewardship of health-care resources. The program is also involved in a growing relationship with Kansas City Hospice, which has a 32-room facility for terminally ill patients who are unable to return home. Two Palliative Care fellows, one funded through Kansas City Hospice, rotate between the two facilities during the year.

The Division is involved in two areas of funded research: (1) Medication use and risk in the elderly, and 2) Community-based adult and childhood obesity prevention programs. Faculty members are involved in scholarship through the Office of Scholarly, Academic and Research Mentoring, medical school and residency initiatives and quality programs.



Palliative Care
Dr. Lindy Landzaat



Hospital Medicine
Dr. Abebe Abebe



Ambulatory Medicine
Dr. Courtney Rhudy



Geriatrics
Dr. Deon Hayley

- FACULTY:**
- Abebe Abebe, MD
 - David Abernethy, MD
 - Zalina Ardasenov, MD, PhD
 - William Atkinson, MD
 - Stewart Babbott, MD
 - Jeffrey Beasley, DO
 - David Becker, MD
 - Kenneth Boc, MD
 - Jane Broxterman, MD
 - Ravindra Chuda, MD
 - Christopher Crenner, MD, PhD
 - Edward Ellerbeck, MD
 - Sarah Folscroft, MD
 - William Gabrielli, MD, PhD
 - Cheryl Gibson, PhD
 - Deon Hayley, DO
 - Ryan Hays, MD
 - Laurie Hohberger, MD
 - Jessica Kalender-Rich, MD
 - Lynne Kallenbach, MD
 - Theresa King, MD
 - Brinda Koya, MD
 - Lindy Landzaat, DO
 - Becky Lowry, MD
 - Angela Mayorga-May, MD
 - Jimmy Mbogori, MD
 - Kurt Midyett, MD
 - David Naylor, MD
 - Amber Niewald, MD
 - Carnie Nulton, M.D.
 - Isaac Opole, MD, PhD
 - Rebecca Opole, MD
 - Aroop Pal, MD
 - Archana Pareek, MD
 - Melissa Parkhurst, MD
 - Padma Poddutoori, MD
 - Karin Porter-Williamson, MD
 - Courtney Rhudy, MD
 - Sally Rigler, MD
 - Dominic Robine, DO
 - Mayra Sanchez, MD
 - Gillian Schmidt, MD
 - Lisa Shenkman, MD
 - Ky Stoltzfus, MD
 - Mohammad Taha, MD
 - Lisa Vansaghi, MD

*denotes VA

The essence of general medicine is its involvement in the continuum of patient care: in office, between the office and the hospital, across a person's life span, and with a focus on older adults and people at the end of life. Similarly, we care for the learner across the continuum, from student to resident to faculty.

HEMATOLOGY AND ONCOLOGY

Peter Van Veldhuizen, MD, Division Director



With 21 clinical faculty, 10 research faculty, and 10 fellows-in-training, the Hematology and Oncology Division strives to provide the highest-quality compassionate care to our patients. Our goal is to continue to provide a comprehensive and multidisciplinary approach for patients as we treat their disease, collaborating with other disciplines, including radiation oncology, surgery, pathology, radiology, and psychosocial support to develop the best treatment approach.

Highlights within the Division include our Blood and Marrow- Transplant Program, Oncology Program, Hematology Program, and Research Program. The combination of a strong clinical practice and a well-rounded research program is echoed in

the Division's dynamic Oncology Program, which is highlighted by site-specific expertise in the areas of breast, head/neck, gastrointestinal, genitourinary, brain, and melanoma/sarcoma and lung cancer. Our emerging Hematology Program in myeloma, lymphoma and myelodysplasia/elderly leukemia also echoes that growth and development. Each discipline works closely with its multidisciplinary clinical research working group to develop and promote new, innovative treatment approaches, allowing us to offer novel drugs and clinical trials to our patients.

Our active Blood-and-Marrow Transplant Program continues to expand and serve as a regional resource offering the highest in quality for our transplant patients.

The Division's nationally recognized Breast Cancer Prevention and Survivorship Program, led by Dr. Carol Fabian, continues to offer the latest in technology to help both predict breast cancer development and to ensure a return to normal life for those who have suffered from this disease. Success of this program is highlighted by a recent \$5 million grant from the Susan B. Komen Foundation to study the effect of flaxseed as a preventive strategy.

Our Basic Science Research Program continues to grow as these researchers work closely with our clinical staff to help ensure new clinical and laboratory research findings reach patients as quickly as possible. Together with the Cancer Center, the University and KU Hospital we continue to

work toward the universal goal of becoming an NCI-designated Cancer Center. This designation is considered the gold standard in cancer research and is given only to institutions doing significant research to fight the war on cancer.

Patients who require admission to our hospital benefit from the division's hospitalist service which provides unique expertise and care during patients' hospital stays. Additionally, through our telemedicine/teleoncology program and our interaction with the Midwest Cancer Alliance we are able to reach out to patients across the state of Kansas. These efforts provide patients with additional hematology/oncology expertise and access to clinical trials for which they may otherwise have limited access.



Dr. Carol Fabian

A Flaxseed Extract for Breast Cancer Prevention

Can lignans, which are found in a variety of edible plants but with the highest concentration in flaxseed, really help prevent breast cancer in premenopausal women? Pre-clinical and some epidemiologic studies suggest that is the case; but intervention trials are in their earliest stages. The mechanism of action is not entirely clear but may be due to a reduction in the estrogen receptor (ER) alpha and inflammatory cytokine signaling, as well as an increase in tumor-suppressor-gene signaling via BRCA1. Our breast cancer team, led by Dr. Carol Fabian, recently conducted a pilot study in premenopausal women at increased risk for breast cancer, in which the lignan Secoisolariciresinol (SECO) was given for 12 months, resulting in reduced proliferation in benign breast hyperplastic cells, as well as a reduction in the proportion of women with atypical breast epithelial cells. Side effects were minimal. On the basis of this positive pilot study, they successfully competed for a \$5 million Komen Promise Grant in 2010, which will allow them to continue this study with a larger scale clinical trial.

Blood and Marrow Transplant (BMT) Program

Since expanding in July 2007, the Blood and Marrow Transplant Program has continued to experience tremendous growth and success. As a result, the program has become the largest in the region and has achieved outcomes outpacing some of the most reputable BMT programs in the nation. In 2010 (CY10), under the leadership of Joseph McGuirk, BMT Medical Director, and Sunil Abhyankar, Medical Director of Apheresis and Stem Cell Processing, the program expects to perform 172 transplants, which is the highest annual volume since the program's inception in 1977 and will exceed its previous record of 164 last year.

In fact, in 2010 the program achieved a number of accomplishments which made this one of the most successful years during the program's history. According to a report generated from the University Health Consortium's (UHC) database, in terms of drug utilization, efficacy, costs, and overall mortality, the program's outcomes for acute leukemia, non-Hodgkin lymphoma, and multiple myeloma surpassed many of the best cancer centers in the nation. In addition, the program became Kansas' first National Marrow Donor Program (NMDP)-designated collection center, one of 96 throughout the nation. "Becoming a donor collection center really completes our role as a comprehensive transplant program," Dr. Joseph McGuirk said.

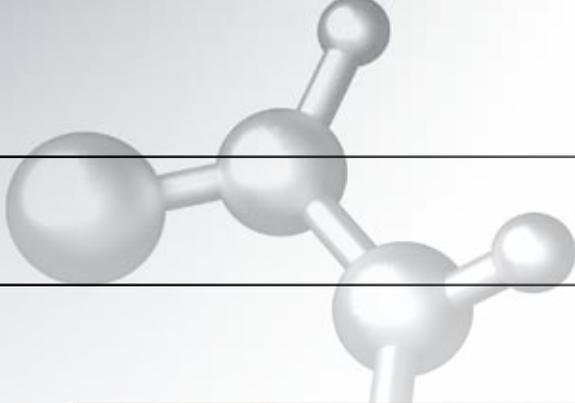


Dr. Joseph McGuirk

FACULTY:

- Sunil Abhyankar, MD**
- Omar Aljittawi, MD**
- Snigdha Banerjee, PhD***
- Sushanta Banerjee, PhD***
- Joaquina Baranda, MD**
- Kapil Bhalla, MD**
- Emma Borrega-Diaz, PhD**
- Animesh Dhar, PhD***
- Gary C. Doolittle, MD**
- Carol J. Fabian, MD**
- Faris Farassati, PhD**
- Allan Fleming, MD**
- Siddhartha Ganguly, MD**
- Rama Garimella, PhD**
- Nisreen Haideri, MD***
- Inamul Haque, PhD***
- Chao Huang, MD***
- Suman Kambhampati, MD***
- Qamar Khan, MD**
- Jennifer Klemp, PhD**
- Brinda Koya, MD**
- Smita Mehta, PhD***
- Joseph McGuirk, DO**
- Prakash Neupane, MD**
- Brian Petroff, PhD**
- Ruben Reyes, MD**
- Robert Rodriguez, MD**
- Priyanka Sharma, MD**
- Sarah A. Taylor, MD**
- Stephen K. Williamson, MD**
- Peter Van Veldhuizen, MD***

*denotes VA



INFECTIOUS DISEASES

Daniel Hinthorn, MD, Division Director



The Infectious Diseases Division is dedicated to providing excellence in patient care for people who have an infection or a related complex illness. The Infectious Diseases physician is trained to guide the patient's evaluation to find the underlying cause of

obscure diagnoses and to recommend a plan. Our mission moves us to share methods of improving medical quality at regional and national conferences. Besides making difficult diagnoses, the strengths of the Division focus on bone and joint implant infections,

liver disease and hepatitis, tuberculosis, and HIV and disorders of immune system, including infections after transplantation. Infectious diseases research deals with new methods of infection prevention, immunization to prevent diarrhea, anti-viral therapy,

and causes of pneumonia. Strong collaboration with colleagues in epidemiology, microbiology, and virology assist us in our commitment to improve the healthcare of people in Kansas and this region.



FACULTY:

Paul Brune, MD
Lisa Clough, MD
Arundhati Desai, MD*
Albert Eid, MD
Wissam El Atrouni, MD
Nivedita Ganguly, MD
Kassem Hammoud, MD
Dana Hawkinson, MD
Daniel Hinthorn, MD
Vinutha Kumar, MD*
Michael Luchi, MD
David McKinsey, MD*
Joel McKinsey, MD
Fernando Merino, MD
Stephen Waller, MD

*denotes VA

Dr. Dana Hawkinson (foreground) with principal investigator Dr. Faris Farassati review a Western blot evaluating protein expression of a novel herpesvirus used to target and kill pancreatic cancer.

MEDICAL EDUCATION

Lisa Vansaghi, MD, Division Director

The Department of Internal Medicine at the University of Kansas has been training residents since 1956. Many of these graduates are now leaders in the medical community, published clinicians, and steadfast mentors. Our tradition of training excellent internists continues.

Residents are educated at three training sites: the University of Kansas Hospital, the Kansas City Veterans Affairs Medical Center, and the Leavenworth VA Medical Center. At the University of Kansas Hospital, residents have opportunities to work with the Department of medicine's outstanding clinician educators, learning not only traditional physical diagnosis and medical decision-making, but also the intricacies of cutting-edge technology and research. At each Veterans Hospital, residents learn from dedicated faculty and gain valuable and rewarding experience in caring for our nation's veterans. Each facility provides opportunities for residents to experience multiple facets of medicine, including both general medicine and sub-specialty care.

The Department of Internal Medicine at the University of Kansas trains sub-specialty fellows in each of its 13 divisions. After completion of residency training, about 60 percent of graduating residents pursue fellowships, both



at KU and across the country. The Department is proud of the representation of its trainees at a variety of prestigious institutions nationwide. Many return to KU to continue their careers upon completion of their training. About 20 percent of residents choose to fulfill the primary-care needs of the community and work in a private-practice setting. Their continuity care experience at the KU Internal Medicine, the Kansas City VA Hospital, KU Westwood Campus Internal Medicine and a variety of private off-site outpatient clinics prepares them to address preventive, acute and chronic outpatient care. Additionally, a strong partnership with Swope Health Services fosters service to patients with limited resources.

Another 20 percent of graduating residents become academic

faculty in general medicine, and continue to foster the tradition of excellent mentorship for medical students and residents. Thus, residents have the opportunity to learn from new emerging medical leaders as well as more experienced faculty. The Department of Internal Medicine's faculty are involved in teaching at resident Core Conferences, Grand Rounds, Patient Safety Conference, Clinicopathologic Conference, Ethics Conference, and, most importantly, at the patient bedside. It is no surprise that the Residency Review Committee for Internal Medicine commended our faculty for its enthusiasm for teaching at our last accreditation visit in 2007.

Although our program's history is filled with innovation in the clinical and diagnostic realm of medicine, our efforts in research

abound. Residents are at the forefront of cancer research, quality improvement, and advances in medicine. Scholarly work is a requirement of the training program, but more than 50 percent of our residents surpass the requirement by devoting additional elective time to research with a faculty mentor.

Through the diversity of clinical experience and the mentorship of faculty members, novice graduates of medical school are transformed into competent and compassionate internists during their three years of training. The Department of Internal Medicine takes great pride in its graduates.

From 1956 to the present, the tradition continues to develop strong leaders within a dynamic, impacting, and valuable profession.

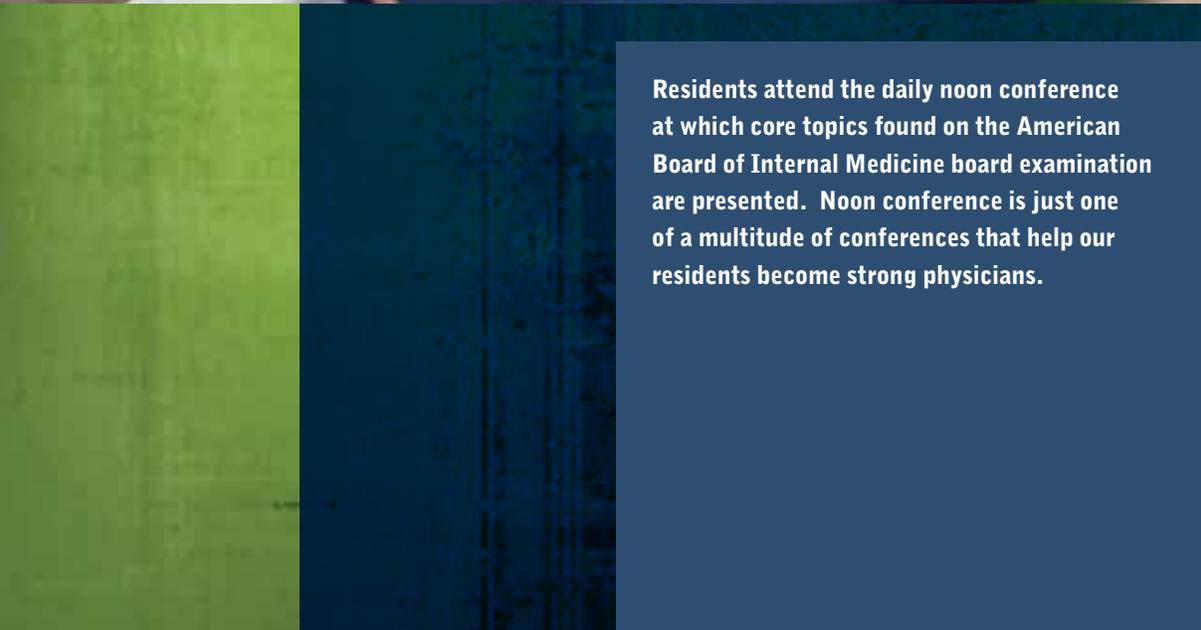


Faculty:
Stewart Babbott, MD
Jane Broxterman, MD
Leigh Eck, MD
Allan Fleming, MD
Alex Hallock, MD*
Becky Lowry, MD
Michael Luchi, MD
Trent Nauser, MD*
Micah Pescetto, DO
Courtney Rhudy, MD
Sally Rigler, MD
Stephanie Thompson, MD
Lisa Vansaghi, MD
Tim Williamson, MD

*denotes VA



Residents attend the daily noon conference at which core topics found on the American Board of Internal Medicine board examination are presented. Noon conference is just one of a multitude of conferences that help our residents become strong physicians.



NEPHROLOGY AND HYPERTENSION

Franz Winklhofer, MD, Division Director



The Kidney Disorders Program ranks among the nation's top 50 programs in *U.S. News & World Report's* Best Hospitals 2010-11, with a ranking of No. 32. This is the Division's second year to achieve the honor, with a ranking of No. 48 in 2009-10.

The expertise and dedication of the 10 clinicians in the Division is evident throughout this outstanding clinical organization. Their commitment is demonstrated by the excellent patient outcomes of the kidney transplant program (among the best in the nation); in the rapidly expanding inpatient consult service, which will see a new dialysis unit built in 2011 to provide state-of-the-art hemodialysis therapies; and in the outpa-

tient hemodialysis and self-care dialysis programs (peritoneal and home hemodialysis).

Physician-scientists involved in basic, translational, and clinical research, Ph.D. basic scientists, and clinicians have distinguished themselves among their peers for work in polycystic kidney disease, kidney development, bone and mineral metabolism, and transplantation. Two of our physician faculty members have recently received NIH-sponsored research career development awards, which will allow them to conduct research exploring the interrelationships of mineral metabolic pathways in kidney disease and examining the most appropriate treatment of atrial

fibrillation to prevent strokes in dialysis patients.

Along with its clinical strength, the Division offers a Fellowship Program designed to train future nephrologists, as well as individuals who will become physician-scientists. Nine trainees are currently enrolled in one of two nephrology tracks: a two-year clinical fellowship and a three-year combined clinical/ research fellowship, which is accredited by the Accreditation Council for Graduate Medical Education (ACGME). The Division currently holds a prestigious institutional training grant from the NIH, which has provided financial support for the last five years. This highly sought-after funding allows

the Division to further enhance the educational and research opportunities provided to its fellows.

The Division of Nephrology is an integral part of the Kidney Institute, which serves as a model for developing a comprehensive, multidisciplinary approach to the prevention, diagnosis, and treatment of kidney disease. The Kidney Institute is made up of faculty, fellows, and research associates across departments and disciplines. The extensive interdepartmental participation reflects a collegial atmosphere that allows established investigators and trainees alike to take full advantage of the scientific resources KUMC has to offer.



FACULTY:

Arnold M. Chonko, MD
Dennis Diederich, MD
Archana Goel, MD*
Jared Grantham, MD
Aditi Gupta, MD
Amina Khan, MD*
Ellen McCarthy, MD
Peter Rowe, PhD
Virginia Savin, MD*
Mukut Sharma, PhD*
Jason Stubbs, MD
Darren Wallace, PhD
Connie Wang, MD
James Wetmore, MD
Thomas Wiegmann, MD
Franz Winklhofer, MD
Sri Yarlagadda, MD

***denotes VA**

Dr. Franz Winklhofer speaks with a patient who was diagnosed with polycystic kidney disease in 2002. In 2005, this patient received a life-saving kidney transplant at KUMC. She recently celebrated her fifth year of successful recovery since transplantation. The patient now gives back by being actively involved in fundraising efforts with the Polycystic Kidney Disease (PKD) Foundation.

OFFICE OF SCHOLARLY, ACADEMIC & RESEARCH MENTORING

Sally Rigler, MD, Division Director



The Office of Scholarly, Academic & Research Mentoring (OSARM) was created in 2010 to assist junior faculty in the Department of Internal Medicine with scholarly development. Sally Rigler, MD, MPH, serves as Interim Director of the OSARM. She works primarily with junior faculty members who have been awarded departmental pilot research funds and with those who are currently applying for new awards. Susan Pingleton, MD,

leads the Department of Internal Medicine's efforts to implement a consistent and structured mentoring program for all junior faculty members. In the OSARM, Dr. Pingleton works primarily with 22 junior faculty who comprise the "Incubator" faculty group. These faculty members receive more intensive mentoring support, data management and biostatistical resources, and assistance with travel to present their work at national meetings. Jonathan Mahnken,

PhD, Associate Professor of Biostatistics, provides biostatistical mentoring and analytic support for the research and scholarly projects of all OSARM faculty members. Isaac Dong, MS, provides data management services.

The OSARM seminar series addresses a wide variety of topics appropriate for academic faculty members, with scholarship being broadly envisioned and not limited strictly to typical hypothesis-testing, funded research. Seminar

offerings cover topics such as promotion and tenure expectations, how to engage in scholarly activities such as manuscript review, how to prepare abstracts and poster presentations, how to become involved in national professional organizations, and how to use the electronic health record for scholarly projects. This seminar series also provides the Incubator faculty and research-awardees a forum for presenting their own work.

OSARM 2010 grant award recipients



Dr. Nisreen Haideri,
Division of
Hematology/
Oncology

Recipient of an
OSARM Research
Career Award
"An Evaluation of
the Molecular Effects
of Finasteride and
Soy Isoflavones in
the Prevention of
Prostate Cancer"

Dr. Omar Aljitali,
Division of
Hematology/
Oncology

Recipient of
an OSARM
Seed Award
"Ex vivo Expansion
of Umbilical Cord
blood Stem Cells"

Dr. Leigh Eck,
Division of
Endocrinology,
Diabetes and
Metabolism

Recipient of
an OSARM
Seed Award
"Effect of DHA
Supplementation
on Bone Density
Changes in
Lactating Women"

**Dr. Priyanka
Sharma,**
Division of
Hematology/
Oncology

Recipient of
an OSARM
Seed Award
"Biomarker Analysis
of Archived Triple
Negative Breast
Cancer Specimens"

Dr. Jason Stubbs,
Division of
Nephrology and
Hypertension

Recipient of an
OSARM Research
Career Award
"Impact of Vitamin
D Therapies on
Monocyte Function
in End-Stage Renal
Disease"

INCUBATOR FACULTY:
Abebe Abebe, MD
David Becker, MD
Rajib Bhattacharya, MD
John Bonino, MD
Lisa Clough, MD
Tuba Esfandyari, MD
Scott Grisolano, MD
Jessica Kalender-Rich, MD
Theresa King, MD
Heath Latham, MD
Becky Lowry, MD
Fernando Merino, MD
Joel Mermis, MD
David Naylor, MD
Courtney Rhudy, MD
Matthew Sharpe, MD
Elena Sidorenko, MD
Ashley Simmons, MD
Leslie Spikes, MD
Mohammad Taha, MD
Stephen Waller, MD
Connie Wang, MD



Research planning and mentoring meeting for a project being developed by Dr. Lisa Clough. From left to right: Dr. Susan Pingleton, Dr. Lisa Clough, Dr. Sally Rigler, Dr. Jonathan Mahnken, and Isaac Dong.

PULMONARY AND CRITICAL CARE MEDICINE

Amy O'Brien-Ladner, MD, Division Director



This year more than ever, the Division of Pulmonary and Critical Care Medicine has escalated its trajectory toward fulfilling its goals focused on the three missions of the Department: quality patient care, research, and education. The Division entered the *U.S. & World Report* rankings in 2010, ranked 30th among pulmonary and critical care programs from a pool of 5,000 hospitals nationwide. However we are most proud of the ranking of sixth in the nation in overall survival of the patients cared for by these physicians.

In addition, our focus on patient care is manifested by our

Translational Research Program. For example, the ongoing work of the Eli Lilly Distinguished Scholar in Critical Care Medicine strives to improve the recognition and treatment of septic shock throughout the state of Kansas. Another focus of translational research is grounded in the development of our large pulmonary-vascular center, focusing on the treatment, both conventional and in clinical trials, of pulmonary artery hypertension. This research, combined with an award from the Parker B. Francis Pulmonary Research Fellowship and partnering with the Department of Integrated Physiol-

ogy, resulted in work on the aberrations in the pulmonary-vascular bed related to viral infection that result in pulmonary arterial hypertension and was published in the prestigious *American Journal of Respiratory Cell and Molecular Biology* this year.

Educationally, the Division is dedicated to the development and maintenance of the ultimate Pulmonary Critical Care Fellowship: 12 fellows undergo 24 months of intense clinical training that includes all aspects of critical care, bronchoscopy-related procedures and pulmonary medicine, as well as spending a third year doing 12

months on research projects that range from the most basic cancer cell investigation to that associated with outcomes with our rapid-response team. All senior fellows presented their work at the National American Thoracic Society meetings in New Orleans in 2010. All in all, the Division of Pulmonary and Critical Care Medicine, while focusing on our three main missions, is also devoted to the creation and maintenance of sustainable and successful trainee and faculty careers in the field of academic medicine.



While attending meetings in Chicago, the faculty take time out for some team-building activities.

FACULTY:

- Amy O'Brien-Ladner, MD
- H. William Barkman, MD
- Michael Crosser, MD
- Timothy Dwyer, MD
- Gerald Kerby, MD
- Naresh Kodwani, MD*
- Heath Latham, MD
- Joel Mermis, MD
- Trenton Nauser, MD*
- Susan Pingleton, MD
- Mark Plautz, MD*
- Frank Quijano, MD
- Matthew Sharpe, MD
- Steven Q. Simpson, MD
- Leslie Spikes, MD
- Damien Stevens, MD
- Steven W. Stites, MD
- Timothy Williamson, MD

*denotes VA



Allergy, Clinical Immunology, Rheumatology

Merrill, J. T., Neuwelt, C. M., **Wallace, D. J.**, Shanahan, J. C., **Latinis, K. M.**, Oates, J. C., Utset, T. O., Gordon, C., Isenberg, D. A., Hsieh, H., Zhang, D., & Brunetta, P. G. Efficacy and safety of rituximab in moderately to severely active systemic lupus erythematosus: the randomized, double-blind, phase II/III systemic lupus erythematosus evaluation of rituximab trial. *Arthritis Rheum* 2010;62(1):222-233.

Smith, D. D., Tan, X., Tawfik, O., Milne, G., **Steckschulte, D. J.**, & **Dileepan, K. N.** Increased aortic atherosclerotic plaque development in female apolipoprotein E-null mice is associated with elevated thromboxane A2 and decreased prostacyclin production. *J Physiol Pharmacol* 2010;61(3):309-316.

Tan X, Poulouse EM, **Steckschulte DJ**, and **Dileepan KN**. Regulation of the expression of cyclooxygenases and the production of prostaglandin I2 prostaglandin E2 in human coronary artery endothelial cells by curcumin. *J Physiol. Pharmacol.* 2010 (acceptance with revision).

Raveendran, V., Tan, X., Sweeney, M.E., Levant, B., Slusser, J., **Steckschulte, D.J.**, and **Dileepan, K.N.** Lipopolysaccharide induces H1 receptor expression and enhances histamine responsiveness in human coronary artery endothelial cells. *Immunology* 2010. (Acceptance with revision).

Mazzuca, S. A., **Brandt, K. D.**, Chakr, R., & Lane, K. A. Varus malalignment negates the structure-modifying benefits of doxycycline in obese women with knee osteoarthritis. *Osteoarthritis Cartilage* 2010;18(8):1008-1011.

Cardiovascular Diseases

Di Biase, L., Burkhardt, J. D., Mohanty, P., Sanchez, J., Horton, R., Gallinghouse, G. J., **Lakkireddy, D.**, Verma, A., Khaykin, Y., Hongo, R., Hao, S., Beheiry, S., Pelargonio, G., Dello Russo, A., Casella, M., Santarelli, P., Santangeli, P., Wang, P., Al-Ahmad, A., Patel, D., Themistoclakis, S., Bonso, A., Rossillo,

A., Corrado, A., Raveie, A., Cummings, J. E., Schweikert, R. A., Lewis, W. R., & Natale, A. Periprocedural stroke and management of major bleeding complications in patients undergoing catheter ablation of atrial fibrillation: the impact of periprocedural therapeutic international normalized ratio. *Circulation* 2010;121(23):2550-2556.

Gupta, K. Vertebral artery stenting: not quite ready for prime time! *J Am Coll Cardiol* 2010;56(4):319-320; author reply 320.

Gupta, N., Nayak, R., **Grisolano, S. W.**, **Buckles, D. C.**, & **Tadros, P. N.** Defining patients at high risk for gastrointestinal hemorrhage after drug-eluting stent placement: a cost-utility analysis. *J Interv Cardiol* 2010;23(2):179-187.

Hamid, T., Guo, S. Z., Kingery, J. R., Xiang, X., **Dawn, B.**, & Prabhu, S. D. Cardiomyocyte NF- κ B p65 promotes adverse remodeling, apoptosis, and endoplasmic reticulum stress in heart failure. *Cardiovasc Res* 2010.

Mbogori, J., Chawdhary, K., & **Vacek, J. L.** A man with a worried heart: transient left ventricular apical ballooning and rhabdomyolysis. *Am J Med* 2010;123(2):e11-12.

Meyers, D. G. Smoking bans in public places result in a reduced incidence of acute myocardial infarction. *Expert Rev Cardiovasc Ther* 2010;8(3):311-313.

Nagavalli, S., & **Vacek, J. L.** Approach to incidentally diagnosed isolated ventricular noncompaction of myocardium. *South Med J* 2010;103(7):662-668.

Pase-Sosland, R., Gadallah, S., & **Gupta, K.** Association of atretic left internal mammary graft with internal mammary to pulmonary vasculature fistula: a case series. *J Invasive Cardiol* 2010;22(11):E185-188.

Patel, D., Mohanty, P., Di Biase, L., Shaheen, M., Lewis, W. R., Quan, K., Cummings, J. E., Wang, P., Al-Ahmad, A., Venkatraman, P., Nashawati, E., **Lakkireddy, D.**, Schweikert, R., Horton, R., Sanchez, J., Gallinghouse, J., Hao, S., Beheiry, S., Cardinal, D. S., Zagrodzky, J., Canby, R., Bailey, S., Burkhardt, J.

D., & Natale, A. Safety and efficacy of pulmonary vein antral isolation in patients with obstructive sleep apnea: the impact of continuous positive airway pressure. *Circ Arrhythm Electrophysiol* 2010;3(5):445-451.

Pillarsetti, J., & **Gupta, K.** Giant Inverted T waves in the emergency department: case report and review of differential diagnoses. *J Electrocardiol* 2010;43(1):40-42.

Pillarsetti, J., **Nath, J.**, **Berenbom, L.**, & **Lakkireddy, D.** Cardiac cirrhosis: a rare manifestation of an uncorrected primum atrial septal defect. *J Cardiovasc Med (Hagerstown)* 2010;11(9):689-691.

Pillarsetti, J., Patel, P., Duthuluru, S., Roberts, J., Chen, W., **Genton, R.**, **Wiley, M.**, Candipan, R., **Tadros, P.**, & **Gupta, K.** Cardiac catheterization in patients with end-stage liver disease: Safety and outcomes. *Catheter Cardiovasc Interv* 2010.

Quinn, C. M., & **Dawn, B.** G-CSF and Erythropoietin Combination Therapy for Infarct Repair: Two Plus Two Equals Two?: Editorial to: "Cytokine Combination Therapy with Erythropoietin and Granulocyte Colony Stimulating Factor in a Porcine Model of Acute Myocardial Infarction" by F.S. Angeli, et al. *Cardiovasc Drugs Ther* 2010.

Reddy Vanga, S., Good, M., Howard, P. A., & **Vacek, J. L.** Role of vitamin D in cardiovascular health. *Am J Cardiol* 2010;106(6):798-805.

Reddy, V. P., **Vanveldhuizen, P. J.**, Muehlebach, G. F., Dusing, R. W., Birkbeck, J. P., **Williamson, S. K.**, Krishnan, L., & **Meyers, D. G.** Leiomyosarcoma of the inferior vena cava: a case report and review of the literature. *Cases J* 2010;3:71.

Santangeli, P., Di Biase, L., **Lakkireddy, D.**, Burkhardt, J. D., **Pillarsetti, J.**, Michowitz, Y., Sanchez, J. E., Horton, R., Mohanty, P., Gallinghouse, G. J., Dello Russo, A., Casella, M., Pelargonio, G., Santarelli, P., Verma, A., Narasimhan, C., Shivkumar, K., & Natale, A. Radiofrequency catheter ablation of ventricular arrhythmias in patients with hypertrophic cardiomyopathy: safety and feasibility. *Heart Rhythm* 2010;7(8):1036-1042.

Sheikh, A., & **Vacek, J. L.** Moving towards the future of dyslipidemia management. *South Med J* 2010;103(5):392-393.

Simmons, A., **Vacek, J.**, & **Gupta, K.** A case of left main systolic compression caused by a dilated pulmonary artery in a patient with congenital pulmonic stenosis. *J Invasive Cardiol* 2010;22(11):E176-179.

Solomon, S., & **Vacek, J. L.** Reducing cardiac ischemic events in patients with ACS: prasugrel versus clopidogrel. *Commentary. Postgrad Med* 2010;122(1):198-200.

Sosland, R. P., **Gollub, S. B., Wilson, D. B., & Moriarty, P. M.** The first case report of the treatment of transplant coronary artery disease with dextran sulfate adsorption lipid apheresis. *Ther Apher Dial* 2010;14(2):218-221.

Tang, X., Rokosh, G., Sanganalmath, S. K., Yuan, F., Sato, H., Mu, J., Dai, S., Li, C., Chen, N., Peng, Y., **Dawn, B.**, Hunt, G., Leri, A., Kajstura, J., Tiwari, S., Shirk, G., Anversa, P., & Bolli, R. Intracoronary administration of cardiac progenitor cells alleviates left ventricular dysfunction in rats with a 30-day-old infarction. *Circulation* 2010;121(2):293-305.

Vanga, S. R., Bommana, S., Kroll, M., & **Lakkireddy, D.** Impedance Changes on Defibrillation Coils after Atrial Fibrillation Ablation: Lead Damage or Electromechanical Interference? *Pacing Clin Electrophysiol* 2010.

Vanhoose, L., Sawers, Y., Loganathan, R., **Vacek, J. L.**, Stehno-Bittel, L., Novikova, L., Al-Jarrah, M., & Smirnova, I. V. Electrocardiographic changes with the onset of diabetes and the impact of aerobic exercise training in the Zucker Diabetic Fatty (ZDF) rat. *Cardiovasc Diabetol* 2010;9:56.

Verma, A., Wulffhart, Z., **Lakkireddy, D.**, Khaykin, Y., Kaplan, A., Sarak, B., Biriya, M., **Pillarsetti, J.**, Bhat, P., Di Biase, L., Constantini, O., Quan, K., & Natale, A. Incidence of left ventricular function improvement after primary prevention ICD implantation for non-ischaemic dilated cardiomyopathy: a multicentre experience. *Heart* 2010;96(7):510-515.

Whellan, D. J., Ousdigian, K. T., Al-Khatib, S. M., Pu, W., Sarkar, S., **Porter, C. B.**, Pavri, B. B., & O'Connor, C. M. Combined heart failure device diagnostics identify patients at higher risk of subsequent heart failure hospitalizations: results from PARTNERS HF (Program to Access and Review Trending Information and Evaluate Correlation to Symptoms in Patients With Heart Failure) study. *J Am Coll Cardiol* 2010;55(17):1803-1810.

Zuba-Surma, E. K., Guo, Y., Taher, H., Sanganalmath, S. K., Hunt, G., Vincent, R. J., Kucia, M., Abdel-Latif, A., Tang, X., Ratajczak, M. Z., **Dawn, B.**, & Bolli, R. Transplantation of expanded bone marrow-derived very small embryonic-like stem cells (VSEL-SCs) improves left ventricular function and remodeling after myocardial infarction. *J Cell Mol Med* 2010.

Solomon S, **Vacek JL.** Invited article: Practice Pearls. Prasugrel versus clopidogrel in patients with acute coronary syndrome. *Postgrad Med.* 2010 Jan;122(1):198-200.

Sosland, R. P., **Gollub, S. B., Wilson, D. B., & Moriarty, P. M.** The first case report of the treatment of transplant coronary artery disease with dextran sulfate adsorption lipid apheresis. *Ther Apher Dial* 2010;14(2):218-221.

Chehab BM, **Gupta K,** Vamanan K. Percutaneous treatment of severe diffuse stenosis in heavily calcified infra-renal abdominal aorta using iliac extender endoprosthesis. *Vasc Med* 2010; 15:140.

Vanga SR, Annapureddy C, Biriya M, **Lakkireddy D.** Monomorphic Outflow Tract Ventricular Tachycardia Unique Presenting Manifestation of Gitelman's Syndrome. *Journal of Atrial Fibrillation.* 2010; <http://dx.doi.org/10.4022/jafib.v1i10.560>.

Pillarsetti J, Singh V, **Gupta K.** A 55- year old man with chest pain and Giant T waves. *J Electrocardiography.* 2010;43(1):40-42.

Mbogori, J., Chawdhary, K., & **Vacek, J. L.** A man with a worried heart: transient left ventricular apical ballooning and rhabdomyolysis. *Am J Med* 2010;123(2):e11-12.

Watson, L.J., Facundo, H.T., Ngoh, G.A., Ameen, M., Brainard, R.E., Lemma, K.M., Long, B.W., Prabhu, S.D., **Xuan, Y.T.**, Jones S.P. O-linked beta-N-acetylglucosamine transferase is indispensable in the failing heart. *Proc Natl Acad Sci U S A* 2010;107(41):17797-17802.

Clinical Pharmacology

Davis, P. F., Ozias, M. K., Carlson, S. E., **Reed, G. A.**, Winter, M. K., McCarron, K. E., & Levant, B. Dopamine receptor alterations in female rats with diet-induced decreased brain docosahexaenoic acid (DHA): interactions with reproductive status. *Nutr Neurosci* 2010;13(4):161-169.

Faseru, B., Cox, L. S., Bronars, C. A., **Opole, I., Reed, G. A.**, Mayo, M. S., Ahluwalia, J. S., & Okuyemi, K. S. Design, recruitment, and retention of African-American smokers in a pharmacokinetic study. *BMC Med Res Methodol* 2010;10:6.

Grasing, K., Mathur, D., & Desouza, C. Written emotional expression during recovery from cocaine dependence: group and individual differences in craving intensity. *Subst Use Misuse* 2010;45(7-8):1201-1215.

Grasing, K., Mathur, D., Newton, T. F., & DeSouza, C. Donepezil treatment and the subjective effects of intravenous cocaine in dependent individuals. *Drug Alcohol Depend* 2010;107(1):69-75.

Moriarty, P., Sosland, R., **Gibson, C.**, & Belmont, J. Comparison of different low density lipoprotein apheresis machines on brain natriuretic Peptide levels in patients with familial hypercholesterolemia. *Ther Apher Dial* 2010;14(1):74-78.

Moriarty, P. M., Luyendyk, J. P., **Gibson, C. A.**, & **Backes, J. M.** Effect of low-density lipoprotein apheresis on plasma levels of apolipoprotein e4. *Am J Cardiol* 2010;105(11):1585-1587.

Sosland, R. P., **Gollub, S. B., Wilson, D. B., & Moriarty, P. M.** The first case report of the treatment of transplant coronary artery disease with dextran sulfate adsorption lipid apheresis. *Ther Apher Dial* 2010;14(2):218-221.

Newton, T. F., De La Garza, R., 2nd, & **Grasing, K.** The angiotensin-converting enzyme inhibitor perindopril treatment alters cardiovascular and subjective effects of methamphetamine in humans. *Psychiatry Res* 2010;179(1):96-100.

Shireman, T.I., Reichard, A., Nazir, N., **Backes, J.**, Greiner, K.A. Quality of diabetes care for adults with developmental disabilities. *Disability Health J* 2010;3(3):179-185.

Ruisinger, J.F., Backes J.M., Moriarty, P.M. Supratherapeutic Response to Ezetimibe in a Statin Intolerant Patient. *Hospital Pharmacy* 2010;45:45-48.

Dermatology

Deng, B., Parthasarathy, S., **Wang, W.**, Gibney, B. R., Battaille, K. P., Lovell, S., **Zhu, H.** Study of the individual cytochrome b5 and cytochrome b5 reductase domains of Ncb5or reveals a unique heme pocket and a possible role of the CS domain. *J Biol Chem* 2010;285(39):30181-30191.

Schweiger, E. S., Kwasniak, L., & **Tonkovic-Capin, V.** A patient with neviod basal cell carcinoma syndrome treated successfully with photodynamic therapy: case report and review of the literature. *J Drugs Dermatol* 2010;9(2):167-168.

Zhang, Y., Larade, K., Jiang, Z. G., Ito, S., **Wang, W., Zhu, H.**, & Bunn, H. F. The flavoheme reductase Ncb5or protects cells against endoplasmic reticulum stress-induced lipotoxicity. *J Lipid Res* 2010;51(1):53-62.

Handler, M., Hamilton, H., **Aires, D.** Treatment of Peristomal Pyoderma Gangrenosum with Topical Crushed Dapsone. *Journal of Drugs in Dermatology* 2010; Status: accepted for publication.

Miller, A., Dusing, R., Meggison, A., **Aires, D.** (2010) Regression of internal melanoma metastases following application of topical imiquimod to overlying skin. *Journal of Drugs in Dermatology* 2010; Status: accepted for publication.

Endocrinology, Metabolism & Genetics

Dasouki, M., Barohn, R., & Hegde, M. Novel human pathological mutations. Gene symbol: DMD. Disease: Muscular Dystrophy, Duchenne. *Hum Genet* 2010;127(1):109.

Malik, V., Rodino-Klapac, L. R., Viollet, L., Wall, C., King, W., Al-Dahhak, R., Lewis, S., Shilling, C. J., Kota, J., Serrano-Munuera, C., Hayes, J., Mahan, J. D., Campbell, K. J., Banwell, B., **Dasouki, M.**, Watts, V., Sivakumar, K., Bien-Willner, R., Flanigan, K. M., Sahenk, Z., Barohn, R. J., Walker, C. M., & Mendell, J. R. Gentamicin-induced readthrough of stop codons in Duchenne muscular dystrophy. *Ann Neurol* 2010;67(6):771-780.

Renard, M., Holm, T., Veith, R., Callewaert, B.L., Ades, L.C., Baspinar, O., Pickart, A., **Dasouki, M.**, Hoyer, J., Rauch, A., Trapane, P., Earing, M.G., Coucke, P.J., Sakai, L.Y., Dietz, H.C., De Paepe, A.M., & Loeys, B.L. Altered TGFbeta signaling and cardiovascular manifestations in patients with autosomal recessive cutis laxa type I caused by fibulin-4 deficiency. *Eur J Hum Genet* 2010;18(8):895-901.

Midyett, L. K., Rogol, A. D., Van Meter, Q. L., Frane, J., & **Bright, G. M.** Recombinant insulin-like growth factor (IGF)-I treatment in short children with low IGF-I levels: first-year results from a randomized clinical trial. *J Clin Endocrinol Metab* 2010;95(2):611-619.

Schimke, R. N., Collins, D. L., & Stolle, C. A. Paraganglioma, neuroblastoma, and a SDHB mutation: Resolution of a 30-year-old mystery. *Am J Med Genet A* 2010;152A(6):1531-1535.

Gastroenterology, Hepatology and Motility

Camilleri, M., Thorne, N. K., Ringel, Y., Hasler, W. L., Kuo, B., **Esfandyari, T., Gupta, A.**, Scott, S. M., McCallum, R. W., Parkman, H. P., Soffer, E., Wilding, G. E., Semler, J. R., & Rao, S. S. C. Wireless pH-motility capsule for colonic transit: prospective comparison with

radiopaque markers in chronic constipation. *Neurogastroenterol Motil* 2010;22(8):874-882, e233.

Cohen, H., Tomasso, G., Luisa Cafferata, M., Zapata, C., **Sharma, P.**, Armstrong, D., Moraes-Filho, J. P., Blasco, C., Corti, R., Estape, G., Leite Luna, L., Ortuño, R., Sakai, P., Salis, G., Taillard, D., Trakal, E., Valdovinos, M., Vergara, M., & González, O. Latin American consensus on gastroesophageal reflux disease: an update on therapy. *Gastroenterol Hepatol* 2010;33(2):135-147.

Fiocca, R., Mastracci, L., Riddell, R., Takubo, K., Vieth, M., Yerian, L., **Sharma, P.**, Fernström, P., & Ruth, M. Development of consensus guidelines for the histologic recognition of microscopic esophagitis in patients with gastroesophageal reflux disease: the Esohisto project. *Hum Pathol* 2010;41(2):223-231.

Greenberger, N. J., & **Sharma, P.** Update in gastroenterology and hepatology. *Ann Intern Med* 2010;153(1):34-39.

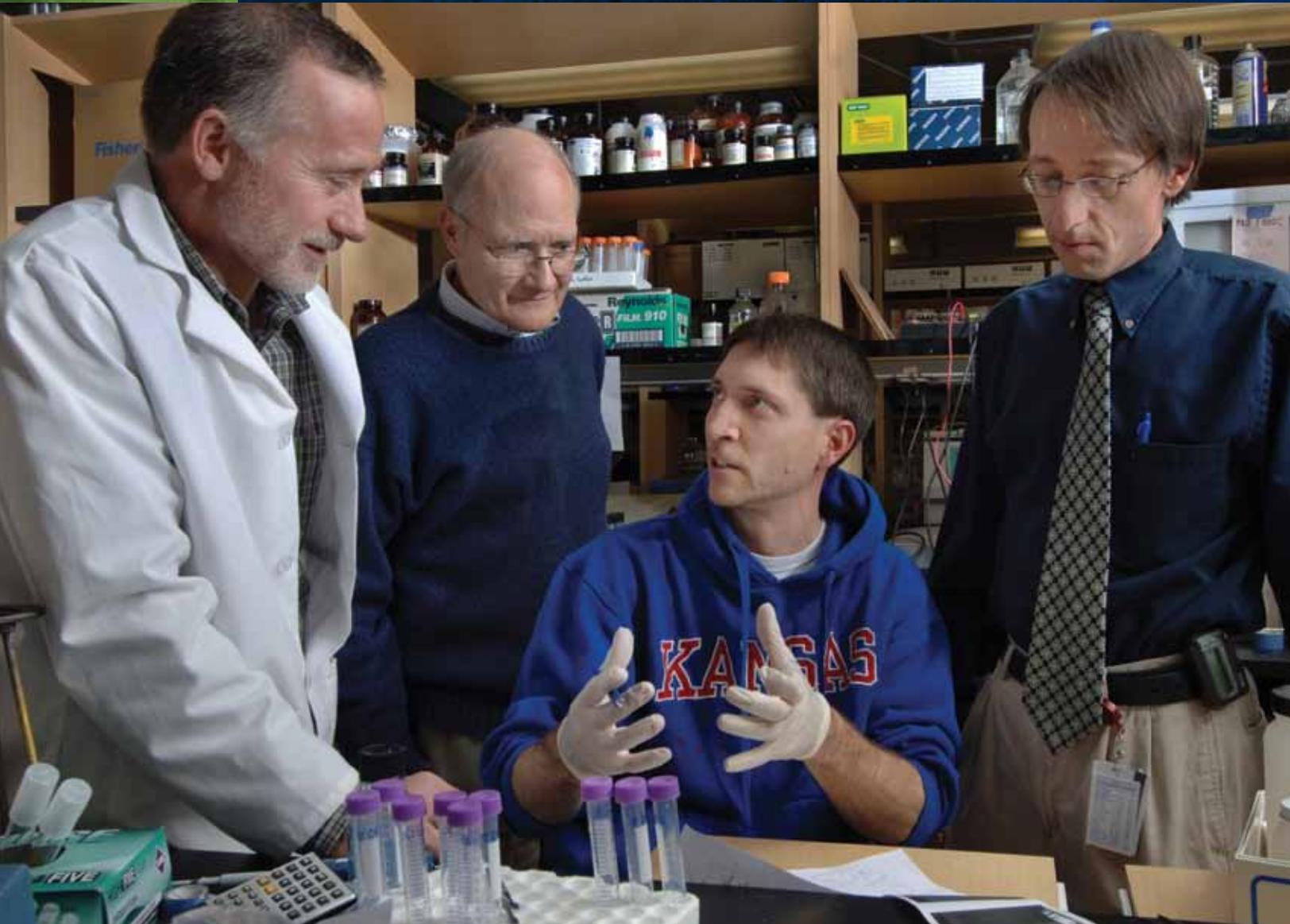
Gupta, N., Nayak, R., **Grisolano, S. W., Buckles, D. C.**, & Tadros, P. N. Defining patients at high risk for gastrointestinal hemorrhage after drug-eluting stent placement: a cost utility analysis. *J Interv Cardiol* 2010;23(2):179-187.

Hejazi, R. A., **Reddymasu, S. C.**, Namin, F., Lavenbarg, T., Foran, P., & McCallum, R. W. Efficacy of tricyclic antidepressant therapy in adults with cyclic vomiting syndrome: a two-year follow-up study. *J Clin Gastroenterol* 2010;44(1):18-21.

Prasad, G. A., Bansal, A., **Sharma, P.**, & Wang, K. K. Predictors of progression in Barrett's esophagus: current knowledge and future directions. *Am J Gastroenterol* 2010;105(7):1490-1502.

Reddymasu, S. C., Lin, Z., Sarosiek, I., Forster, J., & McCallum, R. W. Efficacy of gastric electrical stimulation in improving functional vomiting in patients with normal gastric emptying. *Dig Dis Sci* 2010;55(4):983-987.

- Reddymasu, S. C., & McCallum, R. W.** Small intestinal bacterial overgrowth in gastroparesis: are there any predictors? *J Clin Gastroenterol* 2010;44(1):e8-13.
- Reddymasu, S. C., Sarosiek, I., & McCallum, R. W.** Severe gastroparesis: medical therapy or gastric electrical stimulation. *Clin Gastroenterol Hepatol* 2010;8(2):117-124.
- Rex, D. K., Fennerty, M. B., **Sharma, P.**, Kaltenbach, T., & Soetikno, R. Bringing new endoscopic imaging technology into everyday practice: what is the role of professional GI societies? Polyp imaging as a template for moving endoscopic innovation forward to answer key clinical questions. *Gastrointest Endosc* 2010;71(1):142-146.
- Sharma, P.**, & Kozarek, R. Role of esophageal stents in benign and malignant diseases. *Am J Gastroenterol* 2010;105(2):258-273; quiz 274.
- Szabo, G., Wands, J. R., Eken, A., Osna, N. A., **Weinman, S. A.**, Machida, K., & Joe Wang, H. Alcohol and hepatitis C virus—interactions in immune dysfunctions and liver damage. *Alcohol Clin Exp Res* 2010;34(10):1675-1686.
- Wallace, M. B., **Sharma, P.**, Lightdale, C., Wolfson, H., Coron, E., Buchner, A., Bajbouj, M., Bansal, A., Rastogi, A., Abrams, J., Crook, J. E., & Meining, A. Preliminary accuracy and interobserver agreement for the detection of intraepithelial neoplasia in Barrett's esophagus with probe-based confocal laser endomicroscopy. *Gastrointest Endosc* 2010;72(1):19-24.
- Wang, T., Campbell, R. V., Yi, M. K., Lemon, S. M., & **Weinman, S. A.** Role of Hepatitis C virus core protein in viral-induced mitochondrial dysfunction. *J Viral Hepat* 2010;17(11):784-793.
- Wani, S., Mathur, S. C., Curvers, W. L., Singh, V., Herrero, L. A., Hall, S. B., Ullusarac, O., Cherian, R., McGregor, D. H., Bansal, A., Rastogi, A., Ahmed, B., Singh, M., Gaddam, S., Ten Kate, F. J., Bergman, J., & **Sharma, P.** Greater interobserver agreement by endoscopic mucosal resection than biopsy samples in Barrett's dysplasia. *Clin Gastroenterol Hepatol* 2010;8(9):783-788.
- Wani, S., Sayana, H., & **Sharma, P.** Endoscopic eradication of Barrett's esophagus. *Gastrointest Endosc* 2010;71(1):147-166.
- Wozniak, A. L., Griffin, S., Rowlands, D., Harris, M., Yi, M., Lemon, S. M., & **Weinman, S. A.** Intracellular proton conductance of the hepatitis C virus p7 protein and its contribution to infectious virus production. *PLoS Pathog* 2010;6(9):e1001087.
- Zhang, D., O'Neil M, F., Cunningham, M. T., Fan, F., **Olyae, M.**, & Li, L. Abnormal Wnt signaling and stem cell activation in reactive lymphoid tissue and low-grade marginal zone lymphoma. *Leuk Lymphoma* 2010;51(5):906-910.
- General and Geriatric Medicine**
- Befort, C. A., Donnelly, J. E., Sullivan, D. K., **Ellerbeck, E. F.**, & Perri, M. G. Group versus individual phone-based obesity treatment for rural women. *Eat Behav* 2010;11(1):11-17.
- Cupertino, A. P., Richter, K., Cox, L. S., Garrett, S., Ramirez, R., Mujica, F., & **Ellerbeck, E. F.** Feasibility of a Spanish/English computerized decision aid to facilitate smoking cessation efforts in underserved communities. *J Health Care Poor Underserved* 2010;21(2):504-517.
- Faseru, B., Cox, L. S., Bronars, C. A., **Opole, I., Reed, G. A.**, Mayo, M. S., Okuyemi, K. S. Design, recruitment, and retention of African-American smokers in a pharmacokinetic study. *BMC Med Res Methodol* 2010;10:6.
- Fils, J. M., Penick, E. C., Nickel, E. J., Othmer, E., Desouza, C., **Gabrielli, W. F.**, & Hunter, E. E. Minor versus major depression: a comparative clinical study. *Prim Care Companion J Clin Psychiatry* 2010;12(1):PCC 08m00752.
- Geraci, S. A., **Babbott, S. F.**, Hollander, H., Buranosky, R., Devine, D. R., Kovach, R. A., & Berkowitz, L. AAIM Report on Master Teachers and Clinician Educators Part 1: needs and skills. *Am J Med* 2010;123(8):769-773.
- Geraci, S. A., Kovach, R. A., **Babbott, S. F.**, Hollander, H., Buranosky, R., Devine, D. R., & Berkowitz, L. AAIM Report on Master Teachers and Clinician Educators Part 2: faculty development and training. *Am J Med* 2010;123(9):869-872 e866.
- Landzaat, L. H.**, Sinclair, C. T., & Rosielle, D. A. Continuous-flow left ventricular assist device. *N Engl J Med* 2010;362(12):1149; author reply 1149.
- McDyre, L. E., Hamilton, T., Murphy, D. M., Cavell, K. J., **Gabrielli, W. F.**, Hanton, M. J., & Smith, D. M. A cw EPR and ENDOR investigation on a series of Cr(I) carbonyl complexes with relevance to alkene oligomerization catalysis: [Cr(CO)4L]+ (L = Ph2PN(R)PPh2, Ph2P(R)PPh2). *Dalton Trans* 2010;39(33):7792-7799.
- Moeller, K. E., Shireman, T. I., Generali, J., **Rigler, S.**, & **Mayorga, A.** Pharmacy students' knowledge of black box warnings. *Am J Pharm Educ* 2010;74(1):5.
- Moriarty, P.**, Sosland, R., **Gibson, C.**, & Belmont, J. Comparison of different low density lipoprotein apheresis machines on brain natriuretic Peptide levels in patients with familial hypercholesterolemia. *Ther Apher Dial* 2010;14(1):74-78.
- Moriarty, P. M.**, Luyendyk, J. P., **Gibson, C. A.**, & **Backes, J. M.** Effect of low-density lipoprotein apheresis on plasma levels of apolipoprotein e4. *Am J Cardiol* 2010;105(11):1585-1587.
- Nadkarni, M., Reddy, S., Bates, C. K., Fosburgh, B., **Babbott, S.**, & Holmboe, E. Ambulatory-Based Education in Internal Medicine: Current Organization and Implications for Transformation. Results of A National Survey of Resident Continuity Clinic Directors. *J Gen Intern Med* 2010.
- Penick, E. C., Knop, J., Nickel, E. J., Jensen, P., Manzardo, A. M., Lykke-Mortensen, E., & **Gabrielli, W. F.** Do premorbid predictors of alcohol dependence also predict the failure to recover from alcoholism? *J Stud Alcohol Drugs* 2010;71(5):685-694.



From left to right: Darren Wallace, PhD – Research Associate Professor in Nephrology; James Calvet, PhD – Interim Director of the Kidney Institute; Stephen Parnell, PhD – Research Assistant Professor in Biochemistry; and James Wetmore, MD – Assistant Professor in Nephrology.

Reddy, S. G., **Babbott, S. F.**, Beasley, B. W., Nadkarni, M. M., Gertner, E. J., & Holmboe, E. S. Prevalence and functionality of electronic health records in internal medicine continuity clinics. *Acad Med* 2010;85(8):1369-1377.

Rigler, S. K., Ellerbeck, E., Whittle, J., Mahnken, J., Cook-Wiens, G., & Shireman, T. I. Comparing methods to identify hip fracture in a nursing home population using Medicare claims. *Osteoporos Int* 2010.

Wetmore, J. B., Rigler, S. K., Mahnken, J. D., Mukhopadhyay, P., & Shireman, T. I. Considering health insurance: how do dialysis initiates with Medicaid coverage differ from persons without Medicaid coverage? *Nephrol Dial Transplant* 2010;25(1):198-205.

Hematology/Oncology

Befort, C. A., Austin, H., & **Klemp, J. R.** Weight control needs and experiences among rural breast cancer survivors. *Psychooncology* 2010.

Blanke, C. D., Chansky, K., Christman, K. L., Hundahl, S. A., Issell, B. F., **Van Veldhuizen, P. J.**, Budd, G. T., Abbruzzese, J. L., & MacDonald, J. S. S9511: a Southwest Oncology Group phase II study of trimetrexate, 5-fluorouracil, and leucovorin in unresectable or metastatic adenocarcinoma of the stomach. *Am J Clin Oncol* 2010;33(2):117-120.

Cohen, M. S., Al-Kasspoles, M. F., **Williamson, S. K.**, Henry, D., Broward, M., & Roby, K. F. Combination intraperitoneal chemotherapy is superior to mitomycin C or oxaliplatin for colorectal carcinomatosis in vivo. *Ann Surg Oncol* 2010;17(1):296-303.

Dhar, K., Dhar, G., Majumder, M., Haque, I., Mehta, S., **Van Veldhuizen, P. J., Banerjee, S.** Tumor cell-derived PDGF-B potentiates mouse mesenchymal stem cells-pericytes transition and recruitment through an interaction with NRP-1. *Mol Cancer* 2010;9:209.

Dorff, T. B., Goldman, B., Pinski, J. K., Mack, P. C., Lara, P. N., **Van Veldhuizen, P. J.**, Quinn, D. I., Vogelzang, N. J.,

Thompson, I. M., & Hussain, M. H. A. Clinical and correlative results of SWOG S0354: a phase II trial of CNT0328 (siltuximab), a monoclonal antibody against interleukin-6, in chemotherapy-pretreated patients with castration-resistant prostate cancer. *Clin Cancer Res* 2010;16(11):3028-3034.

Fabian, C. J., Kimler, B. F., Zalles, C. M., **Klemp, J. R., Petroff, B. K., Khan, Q. J., Sharma, P.**, Setchell, K. D. R., Zhao, X., Phillips, T. A., Metheny, T., Hughes, J. R., Yeh, H., & Johnson, K. A. Reduction in Ki-67 in benign breast tissue of high-risk women with the ligan secoisolariciresinol diglycoside. *Cancer Prev Res (Phila)* 2010;3(10):1342-1350.

Ganguly, N., Clough, L. A., Dubois, L. K., **McGuirk, J. P., Abhyankar, S., Aljitawi, O. S.**, O'Neal, N., Divine, C. L., & **Ganguly, S.** Low-dose cidofovir in the treatment of symptomatic BK virus infection in patients undergoing allogeneic hematopoietic stem cell transplantation: a retrospective analysis of an algorithmic approach. *Transpl Infect Dis* 2010;12(5):406-411.

Ganguly, S., Bradley, J. P., Patel, J. S., & Tilzer, L. Role of transfusion in stem cell transplantation: a freedom-from-transfusion (FFT), cost and survival analysis. *J Med Econ* 2010;13(1):55-62.

Hashmi, M. H., & **Van Veldhuizen, P. J.** Interleukin-21: updated review of Phase I and II clinical trials in metastatic renal cell carcinoma, metastatic melanoma and relapsed/refractory indolent non-Hodgkin's lymphoma. *Expert Opin Biol Ther* 2010;10(5):807-817.

Hutt, K. J., Shi, Z., **Petroff, B. K.**, & Albertini, D. F. The environmental toxicant 2,3,7,8-tetrachlorodibenzo-p-dioxin disturbs the establishment and maintenance of cell polarity in preimplantation rat embryos. *Biol Reprod* 2010;82(5):914-920.

Jablonska, O., Shi, Z., Valdez, K. E., Ting, A. Y., & **Petroff, B. K.** Temporal and anatomical sensitivities to the aryl hydrocarbon receptor agonist 2,3,7,8-tetrachlorodibenzo-p-dioxin leading to premature acyclicity with age in rats. *Int J Androl* 2010;33(2):405-412.

Kambhampati, S., Dhar, K., Mehta, S., Haque, I., Dhar, G., Majumder, M., Ray, G., **Vanvelthuizen, P. J., & Banerjee, S. K.** 2-methoxyestradiol inhibits Barrett's esophageal adenocarcinoma growth and differentiation through differential regulation of the beta-catenin-E-cadherin axis. *Mol Cancer Ther* 2010;9(3):523-534.

Khan, Q. J., & Fabian, C. J. How I treat vitamin d deficiency. *J Oncol Pract* 2010;6(2):97-101.

Khan, Q. J., Kimler, B. F., & Fabian, C. J. The relationship between vitamin D and breast cancer incidence and natural history. *Curr Oncol Rep* 2010;12(2):136-142.

Khan, Q. J., O'Dea, A. P., & Sharma, P. Musculoskeletal adverse events associated with adjuvant aromatase inhibitors. *J Oncol* 2010;2010.

Khan, Q. J., Reddy, P. S., Kimler, B. F., Sharma, P., Baxa, S. E., O'Dea, A. P., Klemp, J. R., & Fabian, C. J. Effect of vitamin D supplementation on serum 25-hydroxy vitamin D levels, joint pain, and fatigue in women starting adjuvant letrozole treatment for breast cancer. *Breast Cancer Res Treat* 2010;119(1):111-118.

Kubicek, G. J., Kimler, B. F., Wang, F., Reddy, E. K., Girod, D. A., & **Williamson, S. K.** Chemotherapy in Head and Neck Cancer: Clinical Predictors of Tolerance and Outcomes. *Am J Clin Oncol* 2010.

Male, H. J., Davis, M. B., **McGuirk, J. P., Abhyankar, S., Aljitawi, O. S.**, Zhang, D., & **Ganguly, S.** Blastic plasmacytoid dendritic cell neoplasm should be treated with acute leukemia type induction chemotherapy and allogeneic stem cell transplantation in first remission. *Int J Hematol* 2010;92(2):398-400.

Movsas, B., Langer, C.J., Ross, H.J., Wang, L., Jotte, R.M., Feigenberg, S., Xu, F., **Huang, C.**, Monberg M.J., & Obasaju C.K. Randomized phase II trial of cisplatin, etoposide, and radiation followed by gemcitabine alone or by combined gemcitabine and docetaxel in stage III A/B unresectable non-small cell lung cancer. *J Thorac Oncol* 2010;5(5):673-679.

Petrylak, D. P., Tangen, C. M., **Van Veldhuizen, P. J.**, Goodwin, J. W., Twardowski, P. W., Atkins, J. N., Kakhil, S. R., Lange, M. K., Mansukhani, M., & Crawford, E. D. Results of the Southwest Oncology Group phase II evaluation (study S0031) of ZD1839 for advanced transitional cell carcinoma of the urothelium. *BJU Int* 2010;105(3):317-321.

Reddy, V. P., **Vanveldhuizen, P. J.**, Muehlebach, G. F., Dusing, R. W., Birkbeck, J. P., **Williamson, S. K.**, Krishnan, L., & **Meyers, D. G.** Leiomyosarcoma of the inferior vena cava: a case report and review of the literature. *Cases J* 2010;3:71.

Tawfik, O., Davis, K., Kimler, B. F., Davis, M. K., Hull, S., Fan, F., **Khan, Q. J.**, O'Dea, A. P., & Thomas, P. Clinicopathological characteristics of triple-negative invasive mammary carcinomas in African-American versus Caucasian women. *Ann Clin Lab Sci* 2010;40(4):315-323.

Ting, A. Y., & **Petroff, B. K.** Tamoxifen decreases ovarian follicular loss from experimental toxicant DMBA and chemotherapy agents cyclophosphamide and doxorubicin in the rat. *J Assist Reprod Genet* 2010;27(11):591-597.

Williamson, S. K., Moon, J., Huang, C. H., Guaglianone, P. P., LeBlanc, M., Wolf, G. T., & Urba, S. G. Phase II evaluation of sorafenib in advanced and metastatic squamous cell carcinoma of the head and neck: Southwest Oncology Group Study S0420. *J Clin Oncol* 2010;28(20):3330-3335.

Infectious Diseases

Arthurs, S. K., **Eid, A. J.**, Deziel, P. J., Marshall, W. F., Cassivi, S. D., Walker, R. C., & Razonable, R. R. The impact of invasive fungal diseases on survival after lung transplantation. *Clin Transplant* 2010;24(3):341-348.

Boyce, R. D., Deziel, P. J., Otley, C. C., Wilhelm, M. P., **Eid, A. J.**, Wengenack, N. L., & Razonable, R. R. Phaeohyphomycosis due to *Alternaria* species in transplant recipients. *Transpl Infect Dis* 2010;12(3):242-250.

Brown, R. A., Gralewski, J. H., **Eid, A. J.**, Knoll, B. M., Finberg, R. W., & Razonable, R. R. R753Q single-nucleotide polymorphism impairs toll-like receptor 2 recognition of hepatitis C virus core and nonstructural 3 proteins. *Transplantation* 2010;89(7):811-815.

Eid, A. J., Arthurs, S. K., Deziel, P. J., Wilhelm, M. P., & Razonable, R. R. Clinical predictors of relapse after treatment of primary gastrointestinal cytomegalovirus disease in solid organ transplant recipients. *Am J Transplant* 2010;10(1):157-161.

Eid, A. J., Brown, R. A., Arthurs, S. K., Lahr, B. D., Eckel-Passow, J. E., Larson, T. S., & Razonable, R. R. A prospective longitudinal analysis of cytomegalovirus (CMV)-specific CD4+ and CD8+ T cells in kidney allograft recipients at risk of CMV infection. *Transpl Int* 2010;23(5):506-513.

Eid, A. J., & Razonable, R. R. New developments in the management of cytomegalovirus infection after solid organ transplantation. *Drugs* 2010;70(8):965-981.

Ganguly, N., Clough, L. A., Dubois, L. K., **McGuirk, J. P., Abhyankar, S., Aljitawi, O. S., Ganguly, S.** Low-dose cidofovir in the treatment of symptomatic BK virus infection in patients undergoing allogeneic hematopoietic stem cell transplantation: a retrospective analysis of an algorithmic approach. *Transpl Infect Dis* 2010;12(5):406-411.

Wu, J., Henderson, C., Feun, L., **Van Veldhuizen, P.**, Gold, P., Zheng, H., Ryan T., Blaszkowsky, L.S., Chen, H., Costa, M., Rosenzweig, B., Nierodzik, M., Hochster, H., Muggia, F., Abbadessa, G., Lewis, J., Zhu, A.X. Phase II study of darinaparsin in patients with advanced hepatocellular carcinoma. *Invest New Drugs* 2010;28(5):670-676.

Nephrology and Hypertension

Bae, K. T., & **Grantham, J. J.** Imaging for the prognosis of autosomal dominant polycystic kidney disease. *Nat Rev Nephrol* 2010;6(2):96-106.

Boskey, A. L., Chiang, P., Fermanis, A., Brown, J., Taleb, H., David, V., & **Rowe, P. S.** MEPE's diverse effects on mineralization. *Calcif Tissue Int* 2010;86(1):42-46.

Boukpepsi, T., Gaucher, C., Léger, T., Salmon, B., Le Faouder, J., Willig, C., **Rowe, P. S.**, Garabédian, M., Meilhac, O., & Chaussain, C. Abnormal presence of the matrix extracellular phosphoglycoprotein-derived acidic serine- and aspartate-rich motif peptide in human hypophosphatemic dentin. *Am J Pathol* 2010;177(2):803-812.

Bryan, C. F., Abdulkarim, B., Forster, J., Nelson, P. W., **Diederich, D.**, Murillo, D., & Markham, L. A new role for the virtual crossmatch in kidney allograft reuse. *Transplantation* 2010;89(6):764-765.

Fishbane, S., Milligan, S. L., Lempert, K. D., Hertel, J. E. W., **Wetmore, J. B.**, Oliver, M. J., Blaney, M., Gillespie, B. S., Jacobs, J. R., & Begelman, S. M. The HALT polycystic kidney disease trials: design and implementation. *Clin J Am Soc Nephrol* 2010;5(1):102-109.

Fisher, M. A., **McCarthy, E. T.**, & Manz, M. C. Prevalence of gingival overgrowth in renal transplant recipients on sirolimus immunosuppressive therapy is not clearly established. *J Evid Based Dent Pract* 2010;10(2):93-95.

Fisher, M. A., Taylor, G. W., West, B. T., & **McCarthy, E. T.** Bidirectional relationship between chronic kidney and periodontal disease: a study using structural equation modeling. *Kidney Int* 2010.

Grantham, J. J., Cook, L. T., Wetzel, L. H., Cadnapaphornchai, M. A., & Bae, K. T. Evidence of extraordinary growth in the progressive enlargement of renal cysts. *Clin J Am Soc Nephrol* 2010;5(5): 889-896.

Grantham, J. J., & Sullivan, L. P. The Birth and Early Development of JASN. *J Am Soc Nephrol* 2010;21(1):1-2.

Kugita, M., Nishii, K., Morita, M., Yoshihara, D., Kowa-Sugiyama, H., Yamada, K., Yamaguchi, T., **Wallace, D. P.**, Calvet, J. P., Kurahashi, H., & Nagao, S. Global gene expression profiling in early-stage polycystic kidney disease in the Han:SPRD Cy rat identifies a role for RXR signaling. *Am J Physiol Renal Physiol* 2010.

McCarthy, E. T., Sharma, M., & Savin, V. J. Circulating permeability factors in idiopathic nephrotic syndrome and focal segmental glomerulosclerosis. *Clin J Am Soc Nephrol* 2010;5(11):2115-2121.

Nagao, S., Morita, M., Kugita, M., Yoshihara, D., Yamaguchi, T., Kurahashi, H., **Wallace, D. P.** Polycystic kidney disease in Han:SPRD Cy rats is associated with elevated expression and mislocalization of SamCystin. *Am J Physiol Renal Physiol* 2010;299(5):F1078-1086.

Shireman, T. I., Almehtmi, A., **Wetmore, J. B.**, Lu, J., Pregonzer, M., & Quarles, L. D. Economic analysis of cinacalcet in combination with low-dose vitamin D versus flexible-dose vitamin D in treating secondary hyperparathyroidism in hemodialysis patients. *Am J Kidney Dis* 2010;56(6):1108-1116.

Srivastava, T., **McCarthy, E. T.**, Sharma, R., Cudmore, P. A., Sharma, M., Johnson, M. L., & Bonewald, L. F. Prostaglandin E(2) is crucial in the response of podocytes to fluid flow shear stress. *J Cell Commun Signal* 2010;4(2):79-90.

Stubbs, J. R., Idiculla, A., Slusser, J., Menard, R., & Quarles, L. D. Cholecalciferol supplementation alters calcitriol-responsive monocyte proteins and decreases inflammatory cytokines in ESRD. *J Am Soc Nephrol* 2010;21(2):353-361.

Torres, V. E., Boletta, A., Chapman, A., Gattone, V., Pei, Y., Qian, Q., **Wallace, D. P.**, Weimbs, T., & Wüthrich, R. P. Prospects for mTOR inhibitor use in patients with polycystic kidney disease and hamartomatous diseases. *Clin J Am Soc Nephrol* 2010;5(7):1312-1329.

Wang, C. J., Creed, C., **Winklhofer, F. T.**, & **Grantham, J. J.** Water Prescription in Autosomal Dominant Polycystic Kidney Disease: A Pilot Study. *Clin J Am Soc Nephrol* 2010.

Wetmore, J. B. Review: insufficient evidence exists on the benefit of vitamin D in patients with chronic kidney disease not requiring dialysis. *Ann Intern Med* 2010;152(8):JC4-12.

Wetmore, J. B., Liu, S., Krebill, R., Menard, R., & Quarles, L. D. Effects of cinacalcet and concurrent low-dose vitamin D on FGF23 levels in ESRD. *Clin J Am Soc Nephrol* 2010;5(1):110-116.

Wetmore, J. B., Palsson, R., Belmont, J. M., Sigurdsson, G., Franzson, L., & Indridason, O. S. Discrepancies between creatinine- and cystatin C-based equations: implications for identification of chronic kidney disease in the general population. *Scand J Urol Nephrol* 2010;44(4):242-250.

Wetmore, J. B., Santos, P. W., Mahnken, J. D., Krebill, R., Menard, R., Gutta, H., & Quarles, L. D. Elevated FGF23 Levels Are Associated with Impaired Calcium-Mediated Suppression of PTH in ESRD. *J Clin Endocrinol Metab* 2010.

Xia, S., Li, X., Johnson, T., Seidel, C., **Wallace, D. P.**, & Li, R. Polycystin-dependent fluid flow sensing targets histone deacetylase 5 to prevent the development of renal cysts. *Development* 2010;137(7):1075-1084.

Yamaguchi, T., Reif, G. A., Calvet, J. P., & **Wallace, D. P.** Sorafenib inhibits cAMP-dependent ERK activation, cell proliferation, and in vitro cyst growth of human ADPKD cyst epithelial cells. *Am J Physiol Renal Physiol* 2010;299(5):F944-951.

Zhang, P., Wang, H., **Rowe, P. S.**, Hu, B., & Wang, Y. MEPE/OF45 as a new target for sensitizing human tumour cells to DNA damage inducers. *Br J Cancer* 2010;102(5):862-866.

Pulmonary and Critical Care Medicine

Dhillon, N. K., Li, F., Xue, B., Tawfik, O., Morgello, S., Buch, S., & **O'Brien Ladner, A.** Effect of Cocaine on HIV-mediated Pulmonary Endothelial and Smooth Muscle Dysfunction. *Am J Respir Cell Mol Biol* 2010.

Gracia, F., Armien, B., **Simpson, S. Q.**, Munoz, C., Broce, C., Pascale, J. M., & Koster, F. Convalescent pulmonary dysfunction following hantavirus pulmonary syndrome in Panama and the United States. *Lung* 2010;188(5):387-391.

Latham, H. E., **Dwyer, T. T.**, Gregg, B. L., & **Simpson, S. Q.** An in vitro study comparing a peripherally inserted central catheter to a conventional central venous catheter: no difference in static and dynamic pressure transmission. *BMC Anesthesiol* 2010;10:18.

Simpson, S. Q., Spikes, L., Patel, S., & Faruqi, I. Hantavirus pulmonary syndrome. *Infect Dis Clin North Am* 2010;24(1):159-173.

Pingleton, S. K., Davis, D. A., & Dickler, R. M. Characteristics of quality and patient safety curricula in major teaching hospitals. *Am J Med Qual* 2010;25(4):305-311.

Pingleton, S.K., Davis DA. Learning about the education of quality and safety requires clinical data. *Am J Med*, in press.



Internal Medicine Professorship

Endowed Professorships held by the faculty in the Department of Internal Medicine:

Peter T. Bohan Chair in Medicine

Dr. Steven W. Stites

Capital Federal Masonic Professorship of the University of Kansas Cancer Center

Dr. Gary Doolittle

Maureen and Marvin Dunn, MD Professorship in Cardiovascular Medicine

Dr. Buddhadeb Dawn

Robert P. Hudson/Ralph H. Major Professorship in History and Philosophy of Medicine

Dr. Christopher Crenner

Kansas Masonic Cancer Research Chair

Dr. Carol Fabian

Joy McCann Professorship for Women in Medicine and Science

Dr. Susan Pingleton

Delbert D. Neis, MD Professorship in Cardiovascular Diseases

Dr. David Wilson

Dr. Sam E. Roberts Professorship

Dr. Leland Graves III

Sosland Family Professorship in Preventive Medicine

Dr. Edward F. Ellerbeck

Harry Statland Endowed Professorship in Nephrology

Dr. Jared Grantham

CHAIRMAN'S OFFICE

Steven W. Stites, MD

Peter T. Bohan Professor and Chair
(913) 588-6000

Krista Wimberly

Administrative Coordinator
(913) 588-6001

Marcia Pressly

Administrative Coordinator
(913) 588-6002

Paula Daugherty

Administrative Assistant
(913) 588-6000

ADMINISTRATION

Patrick Steffen

Senior Administrator
(913) 588-5294

Dustin Carrillo

Assistant Administrator
(913) 588-3982

COMMUNICATIONS

Christine Adams

Senior Director of Communications
(913) 945-5077

RESEARCH

Buddhadeb Dawn, MD

Vice Chair for Research

Brenda Stewart

Research Administrator
(913) 588-3851

Darsey Davidson

Administrative Assistant
(913) 588-5293

RESIDENCY OFFICE

Lisa Vansaghi, MD

Division Director

Gerri McPherson

Residency Program Coordinator
(913) 588-6050

KU ENDOWMENT ASSOCIATION

Peggy Person

Director of Development
(913) 588-5441

DIVISIONAL OFFICES

Allergy, Immunology and Rheumatology

Daniel Stechschulte, MD
Division Director

Kelly Hinshaw
Division Coordinator
(913) 588-6008

Cardiovascular Diseases

Buddhadeb Dawn, MD
Division Director

Renee Falsken
Administrative Assistant
(913) 588-6015

Bobbi Sidorenkov
Director Finance and Administration
Cardiovascular Research Institute
(913) 945-7021

Clinical Pharmacology

Patrick Moriarty, MD, FACP, FACC
Division Director

Judy Hultquist
Division Coordinator
(913) 588-6057

Dermatology

Daniel Aires, MD
Division Director

Susan Kovash
Administrative Assistant
(913) 588-3840

Endocrinology, Metabolism and Genetics

Leland Graves, III, MD
Division Director

Tiffany Aubrey
Division Coordinator
(913) 588-6841

Gastroenterology/Hepatology

Mojtaba Olyaei, MD
Division Director

Liz Ramirez
Division Administrator
(913) 588-3283

General Medicine

Stewart Babbott, MD
Division Director

Christy Kieser
Senior Coordinator
(913) 588-5165

Hematology/Oncology

Peter Van Veldhuizen, MD
Division Director

Bea Coletton
Division Coordinator
(913) 588-3802

Infectious Diseases

Daniel Hinthorn, MD
Division Director

Judy Speer
Division Coordinator
(913) 588-6035

Nephrology and Hypertension

Franz Winklhofer, MD
Division Director

Kelsi Remmert
Division Coordinator
(913) 588-6075

Office of Scholarly Academic and Research Mentoring (OSARM)

Sally Rigler, MD, PhD
Division Director

Jennifer Sullivan
Administrative Assistant
(913) 588-4031

Pulmonary and Critical Care Medicine

Amy O'Brien-Ladner, MD
Division Director

Barbara Robinson
Division Coordinator
(913) 588-6046

These names represent the individuals, corporations and foundations who have supported the Department of Internal Medicine through the Kansas University Endowment Association. If you are interested in supporting us in the future, please contact Peggy Person at (913)588-5441.

\$1 - \$999

A.W. and Nellie B. Armstrong Foundation, Inc.
Adesa Kansas City
Saleem Ahmed
Matt Alberts & Nancy Alberts
Bayer Healthcare Pharmaceuticals, Inc
Robert J. Belt, MD
Mark F. Berntsen, MD
Mary H. Boettjer
Mary Ann Post Boliaris
Merle R. Bolton Jr., MD & Ruth A. Bolton, PhD
Larry D. Botts, MD
Braden Roofing, Inc.
Maxine Brockhoff
Debra Brogden
J. Walker Butin, MD & Patricia L. Butin

Phyllis K. Irvine
James R. Smith Family Foundation
Kirk W. Johnson
Timothy A. Johnson & Robin Johnson
Anne L. Jones, MD
Tracey Kahle
Janice Z. Kinney
Jon B. Klein, MD & Laura Roter Klein
Arnold Kratchman & Joe Ann Levine Kratchman
Bill Kunshek & Susan A. Kunshek
Joseph V. Lauria
David L. Lee, MD
Betty J. Lehman
Deloris Lentz
R. Gary Lortscher & Betty J. Lortscher
Bea E. Ludwig
John F. Lukert Jr. & Bette E. Lukert

James M. Sherman, Jr.
Steven R. Short
Larry D. Shuster, MD
Thomas M. Siler, MD & Cynthia Hansen Siler
Shadrach Smith, MD & Deena E. Smith
Sherman M. Steinzeig, MD
Paul F. Terranova, PhD, MD & Katherine F. Roby, PhD
Top King, Inc.
Kim Treccariche
David B. Trinkle, M.D.
UCB, Inc.
University of Kansas Medical Center Auxiliary, Inc.
Elda Viets
Warner Chilcott
Suzanne K. Wedel, MD
Ted Wedell
Lewis J. Wesselius, MD
Sandra Swanson Wiechert & Allen L. Wiechert
Dewey K. Ziegler, MD

Syed F. Jafri, MD
Elbie L. Loeb, MD
Pamela S. Maben, MD
Madden-McFarland Interiors
Shawn M. Magee, MD & S. Dawn Magee
Bradley Wm Marples, MD and Aileen C. McCarthy, MD
Robert L. McBroom, MD
Mark S. McPhee, MD
Merck & Company, Inc.
Dace Miller, MD
Sue Marie Mitchell, MD & Mark C. Meyer, MD
Onyx Pharmaceuticals, Inc.
Peggy B. Person & Doug Person
Ada Ramos
RespirTech
James B. Rhodes, MD & Betty L. Rhodes
Robert L. Ricci, MD & Kathryn Caudle Ricci
Sanofi-Aventis
Karen M. Simpson, MD & William T. Simpson
Stephen T. Steiner, MD & Teresa L. Poggenpohl
Superior Buick-Cadillac
United Therapeutics Corporation
Kathryn E. Welch, MD & John A. Wright

Gerald and Arlis Kerby

The Kerbys have generously started a fund for the Pulmonary and Critical Care Division to support a Professorship for the Division.



Mark D. Carlson, MD & Susan S. Carlson
Nancy Cates
The Chase Group, Inc.
Michael J. Connor, MD
Cosmopolitan Club of Johnson County
Cubist Pharmaceuticals, Inc.
Linda J. Danielle
Raymond L. Daniels, EdD & Joan Spangler Daniels
Michael M. Dehning, MD
Eric Doherty
C. Kathleen Dorey
Edwards Lifesciences, LLC
Robert G. Frazier
Galway Homes of Kansas, Inc.
Kelly L. Gardner
Herbert E. Geier
Genentech, Inc.
Vivian Gier
GlaxoSmithKline
Andrew E. Grossmann, III, MD & Tessa Reese Grossmann
Kenneth W. Hamilton, MD
Dan Harrington
Thomas S. Headlee, MD
John H. Helzberg, MD & Reesa M. Helzberg
Amanda & Bryce Holt - in honor of Lirel Holt
Tedrick A. Housh III
Patricia A. Ilten
InVentiv Commercial Services, LLC

Matrex Exhibits
Stephen J. McCorkle
Michael J. McFarlane, MD & Susan Riden McFarlane
Janie R. Meggers
Edna H. Meyer
Ernest D. Moritz, MD & Barbara F. Moritz
MTB Services, Inc.
Jeff Murray
David Musich & Mrs. David Musich
Krista Olia
Ortho-McNeil-Janssen Pharma, Inc.
James R. Otto, MD
Erwin C. Palmer & Priscilla L. Palmer
Verdi M. Klintworth Peper
Helen Perry
Susan Pressler & Rick Pressler
Lawrence Reasbeck
Redpath Integrated Pathology, Inc.
Robert J. Rhodes II, MD
Dallas L. Richards, MD
Linda K. Richter, PhD & William L. Richter, PhD
Daniel J. Ripp, MD
Betty S. Robinson
Jack D. Rowe & Paula D. Rowe
Robert J. Schmitz, MD & Suzanne French Schmitz
Steve J. Schwab, MD

\$1,000-\$4,999

7th Street Casino
Abbott Laboratories
Advanced Health Media
AMR Flavor Testing Ltd.
Marc A. Asher, MD & Ellie Asher
Dr. Bipin Avashia & Rita B. Avashia
Ronnie Baker & Dierdre Baker
Rodney L. Bishop, MD
Boehringer Ingelheim USA Corporation
Benjamin D. Cowley Jr., MD
Jeffrey S. Crippin, MD & Nancy S. Crippin
John G. Eriksen & Jane Faubion Eriksen
Christopher B. Geha, MD & Becky Geha
Gilead Sciences, Inc.
John M. Goldberg, MD & Marla L. Brockman
James T. Good Jr., MD & Janice W. Good
Norton J. Greenberger, MD & Joan E. Greenberger
Donald W. Hatton, MD and Carol Jones Hatton
IntraMed

\$5,000-\$49,999

The Joe Cates Family Foundation
Jeffery L. Curtis, MD & Connie S. Curtis, RN
Paul A. Johnson, MD & Linda Sturd Johnson
Bob Reintjes, Jr. & Jeannette Reintjes
Reintjes Services, Inc.
Cook, Inc.

\$50,000 and Above

The Chest Foundation
Cray Medical Research Foundation
Emilie Rosebud Diabetes Research Foundation

Joe and Jane Cates

Joseph A. Cates was a patient in the Pulmonary division, and because of the great care he received, his family started a pulmonary research fund for the division.





DEPARTMENT OF
INTERNAL MEDICINE

Department of Internal Medicine Faculty Giving 2010

*Dr. Wissam I. El Atrouni
Dr. Basem Awadh
Dr. Stewart F. Babbott & Dr. Cecelia Babbott
Dr. Lisa McNichols Clough
Dr. Michael Crosser & April S. Crosser
Dr. Buddhadeb Dawn **
*Dr. Kottarappat N. Dileepan & Dr. Kanakam Dileepan
Dr. Timothy T. Dwyer III & Diane M. Dwyer
Dr. Leigh M. Eck
Dr. Albert J. Eid
Dr. Leland Graves III*
*Dr. Dana J. Hawkinson & Courtney Goddard-Hawkinson
Dr. Daniel R. Hinthorn & Aletha S. Hinthorn
Dr. Gerald R. Kerby & Arlis Bergsten Kerby *
Dr. Lindy Landzaat
Dr. Heath E. Latham & Shannon Newton Latham
Dr. Herbert B. Lindsley & Dr. Carol J. Lindsley *
Dr. Chien Liu*

*Dr. Barbara P. Lukert
Dr. Fernando Luis Merino & Caroline S. Chaboo
Dr. Patrick M. Moriarty & Lucille M. Moriarty
Dr. Amy O'Brien-Ladner & Dale Ladner*
Dr. Seyed M. Olyaei & Maryam S. Olyaei*
Dr. Courtney S. Rhudy
Dr. Sally K. Rigler
Dr. David C. Robbins & Dr. Linda Colle Robbins
Dr. Elena Igorevna Sidorenko
Dr. Steven Q. Simpson and Dr. Pamela J. Nicklaus*
Dr. Daniel J. Stechschulte & Helen C. Stechschulte
Dr. Steven Stites & Dr. Sandra R. Stites *
Dr. Ky B. Stoltzfus & Tanya Ortman
Dr. Connie K. Teng
Dr. Lisa M. Vansaghi & Dr. Tom Vansaghi
Dr. Stephen K. Williamson & Marta R. Williamson *
Dr. Tim Williamson & Dr. Karin Porter-Williamson **

****Denotes Deans Club member. A Deans Club member gives a \$1,000 or more annual gift to the Department.***